



Portland, Me Nov 3^d - 1884

Prof Watson

My dear Sir,

I found on Peaks Island today the enclosed grass. It seems to be *Phleum pratense*, but with an extraordinary development of the upper palat, for I found inside the one examined a perfect flower, with one palat. I don't know as it will be of any especial interest, either scientific or otherwise, but thought I would send it any way. Should you not be able to send reply in the enclosed or I will get it Tuesday. Kindly change address to Box 232 Youngstown, O. and much oblige. I would like to be something more in Botany, than a mere collector of specimens, and would be glad if you would suggest some line of study for me - something that needs investigation

Yours very truly
R. H. Ingraham

Dear Mrs. West. There is where the
"republican pillars" is shown you have
been looking for. Your letters, my husband
& I have been all over New York, and
and since they should have been of much
advantage to you, my mind has been
so occupied with other matters and so
especially with the French work upon the
Harmattan, that I have almost forgotten
to write to you. I hope that beyond the
uncertainty it has not been a business
inconvenience to you. I am looking for
the kind of assistance that I can give in
one who can take the main care of
the Harmattan, work up the collec-
tions of plants that come in, and
see the mounting, & the Distribution, and
how to know the Harmattan & the history
thoroughly - in fact one capable of
knowing enough of the Harmattan. He
needs to be an educated man, knowing
not only Latin & some Greek, but French
& German, and, possibly also, professed in
botanical matters. I do not expect to
find such an assistant ready made, but
I do hope for one who will give promise
who can grow up to it in a reasonably short
time. As you think that you can fill the

bill! I fear not.

There is however room for a collector.
I hope assistant, who would do a
good deal of the "Drudging" in the way
of taking care of the specimens and in
the odd ends of work in the library &
Harmattan, and who could by degrees
fit himself for a higher grade of service
if he had the ambition & opportunity for
it. There would be a deal of office work in the library
if the salary of such an one would
of course be much less, say \$400 per
month, ~~for the first year~~ ^{increased}
according to efficiency. The hours of
work would be about 12 hours a day,
though you need not be limited to
that necessarily. Perhaps you would
like to study with him and work up
to something better. I do now know
about nothing there is in you,
but it is not a bad chance for
the right sort of a youth.

I can not give you any further
information respecting the H. C.
I do not think that the finding of it
and success is yet before

F. W. S.

Clifton, N. J.,
Nov. 20/89.

Mr. Sereno Watson,
Cambridge, Mass.,

Dear Sir: — You will
probably remember the "Bellis
Nashii, Thurber," who called
upon you some days ago.

Several weeks ago Mr. Thurber
told me you wanted an assistant,
and asked me how I liked it. I
have been thinking over the
matter since.

Before I could decide as to
the matter it was necessary
for me to see Cambridge
and yourself. I have seen
both, and was pleased. The
only matter on my part yet is
as to salary, hours of work, &c.
Please let me have informa-
on this subject.

As to myself, I am 26
years of age, born in 1864 in
Brooklyn. For other matters
I refer you to Dr. Thurber.
I have been with him pretty
constantly all summer, and
he will be able to give you
the information you may need.

Please accept my thanks
for forwarding the letter to me.

Have you heard anything
further as to the Botany of
California?

Awaiting a reply, I remain

Very respectfully,

Geo. V. Nash.



Clifton, N. J., Dec. 16th, 1889

Dr. Sereno Watson,
Cambridge, Mass.,

Dear Sir:---I have written you twice in regard to a position which I understood was vacant at your place. As I have received no reply, I am entirely at loss to understand the matter.

Our P. M. here is a very negligent fellow and I have come to the conclusion that he must be at fault, and so I am going to register this letter.

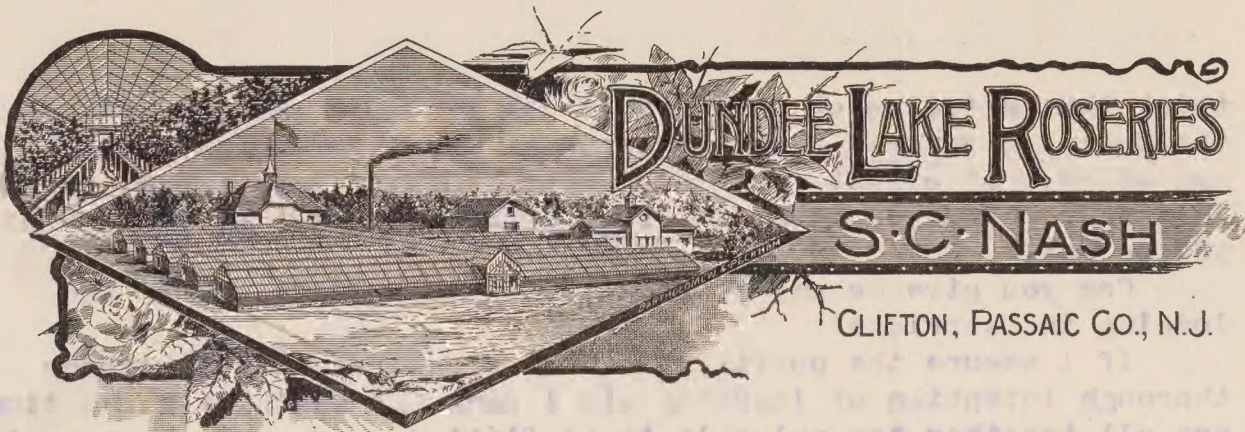
If the position is still unfilled at the Herbarium, will you kindly inform me what the remuneration is, hours of work, etc. I refer you to Dr. Thurber, as to myself.

Trusting this letter will meet with ~~xxxx~~ better success than have its predecessors, I remain

Yours respectfully,

Geo. V. Nash.

P. S.---Have you heard anything yet as to the Botany of California? Can you tell me where I can procure the published part of the Synoptical Flora of N. A.?



Clifton, N. J., Dec. 23rd, 1889.

Dear Dr. Watson:---

Yours of the 20th inst. at hand. It was a surprise to me, for I had given up hope of ever hearing from Cambridge.

I note the contents of your letter. The position I thought was vacant, and for which I applied, was that of "subordinate assistant." I thought, however, that the position would pay more, say \$15.00 per week.

While my knowledge of botany is not extensive, yet I am not entirely green in the matter. I have of course only had opportunity to study local botany of places in which I happened to be. I have spent a good deal of time, however, in the past few years in this way. I have spent all my time outside of business this year in the pursuit of botanical knowledge. As I told you when there, I have been overhauling Dr. Thurber's Grass Herb. for him, having spent on an average of about three nights per week at it since last April. It is certainly very complete, and I have profited a good deal by it. My botanical experience has been almost entirely practical. I never made an herbarium until this year, so of course have not had any experience in mounting specimens.

I studied Latin in school some eight or nine years ago, taking a course of about 2½ years. Of course I studied as a school boy would, but I managed to imbibe something of the construction of the language, and I think I could pick it up in a reasonably short time. Greek I never studied at all. French for only a very short time. German, however, I have done more with. I can speak and understand, and read and write it, each to a certain extent. How scientific German would go, however, I do not know.

I might add that I followed stenography and typewriting in my father's office for several years, and I should judge that they would come in handy in the position you refer to.

As to my ambition, capacity, and "material" I beg to refer you to Dr. Thurber. He can answer such questions better than I, as his wide botanical knowledge will place him in a position to see and understand desirable botanical traits in ~~xx~~ an undeveloped botanical enthusiast.

I was born in May, 1864, and so will soon be 26 years old. I

think that a fellow of that age, if he is worth anything at all in the position you refer to, is worth at least \$50.00 per month. A man of 25 that cannot get that amount in these days is not worth anything. You can find out from Doctor whether I am worth that to you or not.

Can you give me any information as to price of board and lodging in Cambridge?

If I secure the position I shall of course take it with the thorough intention of learning all I can. A man's life and time are all together too valuable to be flitted away. Each man only has a few years to accomplish a thing in, and it depends with him how much he accomplishes. If a thing is worth doing at all it is worth doing well.

Do you still expect to get the new Manual out by the 1st of January? I am anxiously awaiting its arrival. I trust you will soon hear something in regard to the Botany of California, as I am very anxious to obtain a copy of it.

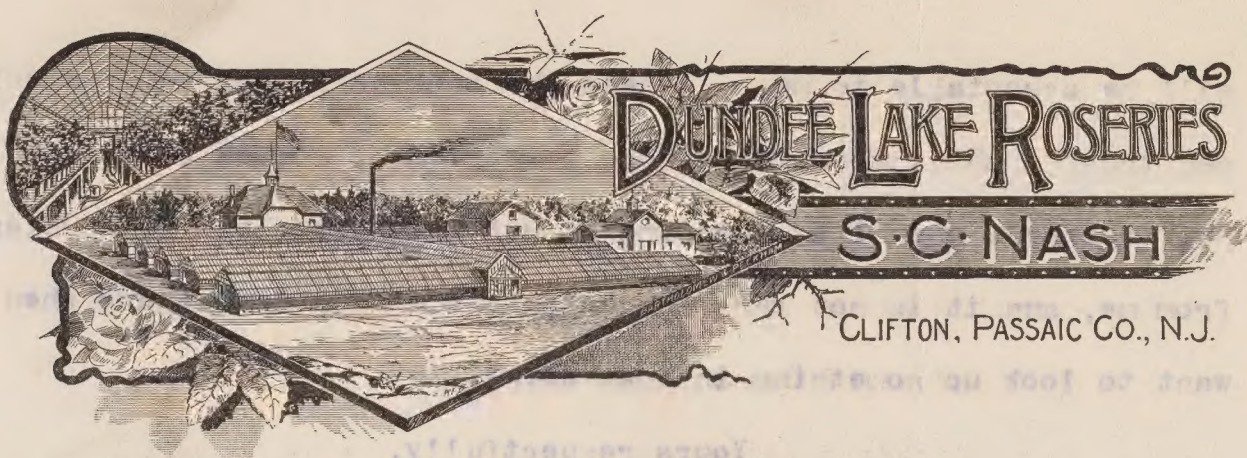
Awaiting your reply, I remain

Yours very truly,

Geo. V. Nash

Dec. 25

I never knew of any one who took up Botany as a money-making business, & if you give yourself to it you must not expect to make a fortune. To be sure \$50 a month is not a very high salary, & \$40 is less, but you must consider that, for a while at least, you will be worth no more than a boy of 16 or 17, & that the training that you are getting may fairly be counted as a part of your compensation. You will show for yourself what you are worth, & in good time I trust that the salary can be made satisfactory. There is one thing to be taken into account, & that is whether you can stand this sedentary kind of life. You will find it very quiet, perhaps sometimes very dull. You will be by yourself much or most of the time, & you may find it hard sometimes to be content with ~~the~~ as much as an ^{it must be} of it time. I do not know that ^{it must be} of more so than it is with most scientific & literary students, but it will be very different from the active outdoor life to which you may be accustomed, & it is well to think of this beforehand. — I think that a good room & decent board can be obtained here for \$6.00 a week. The Manual has gone to press & will probably be out early in Jan. — G. V. T. S.W.



Clifton, N. J., Jan. 13th, 1890.

My Dear Dr. Watson:---

Your letter of the 25th ult. came to hand. I am just getting over an attack of "La Grippe".

I am sorry your letter failed to reach me the first time. It was properly addressed, and should have come all right.

I waited for it, and when I did not hear from you by the 1st of this month, I concluded you did not accept my offer, and so made arrangements with my father for another year. I am very sorry the post office authorities blundered so, for if I had received the letter before the 1st, I should have accepted the position at even \$40.00. It is too late now, however, and there is no use crying over spilled milk.

I find that I need Latin in order to properly carry on the study of Botany, and so shall of course acquire it. If I find I need French, I will obtain a knowledge of that language also.

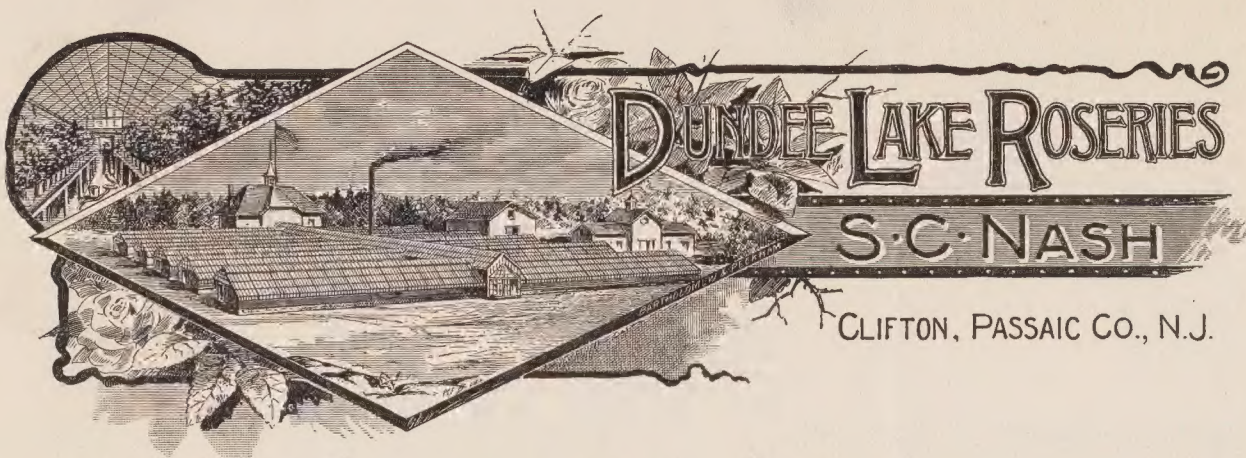
I trust the Manual will soon be placed before the public, as it is a much needed work.

Any information you may have in regard to the Botany of Cal.

will be acceptable to me. I need the book very much in my study,
and trust I shall soon run across a copy. Of course I can use
Dr. Thurber's when I am down there, but he lives about four miles
from me, and it is not very convenient to go way down there when I
want to look up something in that work..

Yours respectfully,

Geo. V. Nash.



Clifton, N. J., April 5th, 1880.

Dear Dr. Watson,

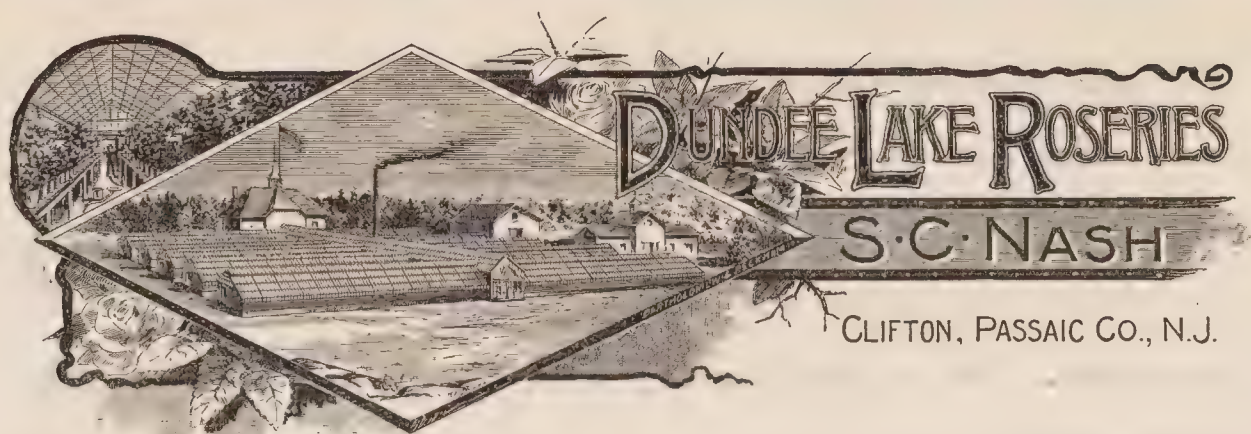
I have some sad news to communicate to you. Dr.
^{2 Apr.}
Thurber died on Wednesday morning, and was buried yesterday. The
body was taken to Providence for interment.

He had been suffering with an attack of rheumatism for some-
time, as I wrote you. I saw him alive a week ago last Sunday for
the last time, and he appeared to be much better. Last Saturday,
however, his mind entirely left him, and he began to mumble a lot
of unintelligible sentences, and from that time on one faculty
after another left him, until it ended in death. He passed off
without a struggle. He was 68 years old.

I thought you would like to hear some of the particulars, and
so write you these few lines.

Sincerely yours,

Geo. V. Nash.



Clifton, N. J., April 13th, 1880.

Dear Dr. Watson,

Your letter at hand. You ask the extent of Dr. Thurber's Herbarium, and what disposition is to be made of it.

I have just returned from Mr. Woolson's, Doctor's son-in-law, and he told me that the Doctor had willed his herbarium to Harvard College, and his library to his nephew, Harry Woolson. Of course I do not care about myself being quoted as an authority for such news. This is simply what Mr. Woolson told me. I am very glad the herbarium has been left to Harvard, as all such herbaria, as valuable as the Doctor's, should be left to some such institution.

The Gramineae of the herbarium is undoubtedly very fine and complete, as to North American forms. The rest I do not know so much about as I did not work in it at all. You will be able to judge of it, however, when you get it there.

Now I want to ask you a few questions. I need some botanical works, and I intend to purchase them one at a time as I can afford it. Where can I procure your "Botany of the 40th Parallel", and "Dr. Rothrock's Botany of the Wheeler Survey?" And what would be the price of each?

Also can you tell me a good work on the Musci of the eastern United States? I would like to look into them a little. I presume the Manual of ~~N~~orth American Mosses, by Messrs. Leo Lesquereux and Thomas James (referred to in the Botany of California) has been published. If so, can you tell me the price, and where I can procure it?

Awaiting your reply, I remain

Yours sincerely,

Geo. C. Nash.

namely so happy as to discover
some species not hitherto known
from that country. I have commu-
nicated a work on the phytogeogra-
phical relations of Spitzbergen to
our royal Academy, but it will
take long time before it can be printed.
During the coming summer I intend
to accompany Nordenkiöld on
an expedition to Greenland in
order (for my part) to study as well
its living as fossil plants. —

Very respectfully

yours

A. Nathorst.

Geological Survey Office
Stockholm Sweden

21 March 1883

Dear Sir,

In the last number of the "American
Journal for Science and Arts," which
has arrived here this day, I have
seen your report of M de Saporta's
work "à propos des algues fossiles".
I find it quite natural that you
after having read his book should
think that he has right. But it
is ^{also} very natural that in defending
his "algues" he cannot be quite
impartial. In order that you
may be able to examine also
my paper referred to, I send you
it by this same mail. Now you
will see that I have never
expressed any doubts as to

the algae described in the 3 first
plates of Saprota's work referred
to, and Saprota in "defending" them
puts me in a somewhat false
position. What I have doubted
and still doubt - with Ramez,
Fuchs, Littel, Carriethers and others
- is the plant-nature of the
algae which Schimper (probably
somewhat doubting himself) has
in his "Handbuch der Palaeontologie"
described under the head of "Algae
incertae sedis", or the groups
Confervitae, Caulerpitae, Chordophyceae,
Arthrophyceae, Rhysophyceae, Mectom-
nidae, Chondritae etc.

Now I will soon be ready with
an answer upon Saprota's book,
and you will then find that it
is not quite certain however
(within a month or two)

that his opinion is true. I have
a very great esteem for Saprota's
work on tertiary plants, but I
do not think that he has been
quite successful in treating
the fossil algae.

I have only to add, that my
work was also sent to the editors
of the American Journal as long
ago as October 1881, but they
seem not to have taken any
notice of it. Saprota seems
to have been more happy -

I send you also a paper on a
true fossil alga from the Silurian
strata of Sweden. I have been
lately occupied with the phaeo-
ganic plants of Spitzbergen which
(including the ferns) now are known
to be 122. Last summer I was

my views as to the temperate
character of that flora. But
I have also got some plants
from the northern part of
the island which are mis-
cane. You will probably be
interested to learn, that
amongst them there occurs
a most beautiful specimen
of Comptonia acutitoba Bryn,
which is known from the
Miocene strata of Europe.
As this species is most nearly
allied to C. asplenifolia it
affords an interesting proof
that this latter probably is
a descendant of the former, which
may have passed to America
over the old land about
Bering's Strait.

Yours very Truly,
A. Mathew.

Geological Survey Office
Stockholm

27 Febr 1884

My dear Professor Gray,

Very many thanks for your
kind letter of 18th Dec. 1883
and please excuse that I
have not answered on it
long ago. But I wished to
be able to state positively,
if I should be able to
go to America this year or
not, and I am sorry to say,
that this will not be possi-
ble. I have many researches
to make in the field this
summer, which cannot be
postponed, as I have al-
ready been absent during
two summers (1882 and 1883) in

consequence of my voyages
to Spitzbergen and Greenland.
And ~~at~~ last but not least
my wife and I hope that
I should be able to find
some leisure this summer,
which ~~she~~ could spend to-
gether with our little chil-
dren. Since we were married
(1878) I have every summer
been obliged to be absent
on different journeys, so that
I have not hitherto spent
any summer with my family.
Also this summer I must
make researches in the
field, but I hope ~~that~~ ^{to} be
^{able to} dispose at least a month
of ~~it~~ for my own part. But
although I cannot visit your
country this summer I am now

ever so very thankful for
your kind invitation, and I
hope that I will be able
to come to you another. And
then I could ^(perhaps) also be able
to visit my dear friend pro-
fessor Lesqueroux and per-
haps ~~to~~ make a trip to
the plant-bearing beds of
the territories etc. Indeed
there are so very many things
and places which I should
like to see, that I hope sin-
cerly once ^{to} be able to come
to America. —

I have lately obtained new
collections of Javan plants
from Japoria. Some of them
are from the southern part
of the Island and ^{they prove} ~~corroborate~~
perfectly the correctness of

Nathorst
Geological Survey Office
Stockholm, Sweden

22 April 1884

line indicates a district, within which all the species are found. Is it not curious that it perfectly coincides with the width of the country, so that with a single exception (*Chironomus hypnoides*) all the species occur within longitudes 15° and 18° ? The theory of Blyth, that the arctic plants does not like the marine climate, seems indeed for a great part to be correct. - The other chart indicates the depths of the seabottom and shows that an elevation of 200 fathoms would connect Spitzbergen with Scandinavia and Novaja Zemlja while the depths against Greenland are very great. As there is reason to believe that Spitzbergen once was elevated so high one might a priori think, that the Flora of Spitzbergen should have immigrated from Europe. And indeed only 3 species are wanting in northern Europe (Scandinavia and Novaja Zemlja) while 12 are wanting in Greenland. There is consequently little doubt that the Spitzbergen Flora has its origin in north-east and not as formerly supposed from Greenland.

Ever yours very truly
A. E. Nathorst.

My dear Professor Gray,
Very many thanks for your kind letter of 25 March and many thanks also for your informations as to the distribution of the different forms or varieties of *Fagus ferruginea* in North America. They will be of great value for my coming work on the fossil Flora of Japonia. I am now quite sure that my opinion as to the colder climate in former times at Mogi is quite correct, since I have obtained a quite similar fossil flora from the still more northerly site Amakusa. Hear was also

of the same opinion.

I have got some leaves from the older tertiary deposits of Japonia, which are very great and ~~resembling~~ *Castanea*, but which according to the position of the veins should rather belong to *Fagus*. They can sometimes be 160 millim. in length with 18-20 pairs of secondary veins. Now I should like to know if you have seen such great leaves in *Fagus ferruginea*? We have not many specimens of *Fagus ferruginea* in our herbarium. If you should possess some such leaves I should be most thankful indeed if you would have the kindness to send me one or two specim-

ens in an ordinary convolute.

In these days I will send you by mail a copy of my work on the Spitzbergen Flora. You will find two maps in it. On the greater, the red line in the inner part of Fensound (Fensjørd) shows the part of the land, in which the vegetation is richest. Of the 123 plants, which are hitherto found in Spitzbergen no less than 115 occur there (when the chart was printed the occurrence of *Colpodium* and *Rubus chamaemorus* was not yet known, and the chart has therefore 113 instead of 115), the localities where the other 8 plants occur, are indicated by their names in red colour. The dotted red

Stockholm 8th November 1884.

Dear Professor Gray,

Very many thanks for the foliage
of the beech, which you kindly
has forwarded to me. They
leaves will be of great use
for the comparison with the
fossil ones. Yours very truly

Almquist.

UNION POSTALE UNIVERSELLE

SUÈDE

BREFKORT

(CARTE POSTALE)



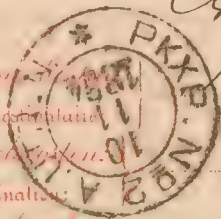
Till (à) *Professor*

Asa Gray M.D.

Botanic Gardens

Cambridge, Mass.

U. S. America



Adressatens

Adresse du destinataire

Bestämmelse

Lieu de destination

Adressändering

Pays de destination

D'Amérique et autres qu'on aime avoir, cela vous
fera un grand plaisir. Je vous rappellerai, en même
temps, qu'on dans projets horticoles et de garantir
le tour de la Méditerranée (Now a French lake)
de palmiers - Il y en a déjà un nombre consi-
dérable à Alger, entre autres le *Elatina berborea*
qui y devient superbe et y fructifie abondamment.
Nous espérons recevoir de la N^{elle} Hollande le mag-
nifique *Divisoma australis*, pour en peupler l'Algé-
rie; mais pour les côtes méditerranéennes septentrion-
nales, telle que la Provence et le Languedoc, il
faudrait des espèces végétales rustiques (a little
more hardy), telles que le *Chamerops* (Sabal) *Salmuelto*,
Chamerops hifrix, *Brachia dulcis* &c. - Déjà
le *Sabal Adansoni* pullule dans les jardins du midi.
absolument like a Weed.

Neuillez excuser, Monsieur, cette longue dis-
sertation } aussi longue que d'ordonner, et, en
agréant nos remerciements, de M. Decaisne et de
moi, un croire votre bien dévoué serviteur,

J. B. Haudin, and Bibraetinus,
aid-naturalists (culture)
au Muséum,

o Muséum)
d'Histoire Naturelle.

Paris, le 7 mai 1858.

Haudin

Monsieur,

M. Decaisne, au moment où votre envoi de
Cucurbitacées nous est parvenue, était sur le point
de partir pour le midi, chargé par l'Académie
de découvrir (s'il le peut) la cause de la ma-
ladie des vers à soie. Nos plantes nous ont fait
à tous deux un extrême plaisir et nous nous
réjouissons pour vous en exprimer nos remerci-
ments. Toutes les racines de *Cucurbita digitata*
ainsi que celle de *Apodanthora* étaient en
parfait état. Je les ai immédiatement plantées sur
couches chaudes et sous châssis, pour les exciter à
pousser et à former des yeux - Je les mettrai
en pleine terre dès qu'elles auront formé leurs
pousses.

Le *Cucurbita perennis* peut être considéré comme
tout à fait naturalisé en France. J'en ai envoyé
Monsieur le D^r Asa Gray.

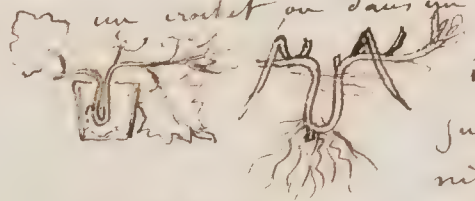
Dans divers provinces, et surtout la plante
devient florissante sans aucune culture. J'ai vu
ce jour dernier une racine de cette espèce qui
dépassait 2 mètres (!) de longueur, et qu'on avait
été forcé d'arracher par ce qu'elle avait envahi
un jardin potager, tout à fait à la manière
d'une mauvaise herbe (Weed). La plante
avait mis plus de 100 fruits l'année précédente.
C'est là un beau fruit, et je voudrais être aussi
heureux avec les nouvelles espèces que vous
nous avez envoyées.

Je cultive en ce moment 4 pieds de
discauthera diffracta (en pleine terre), et j'espère
les voir fleurir cette année. Ne pas confondre
Discauthera avec *Cyclanthera*.

J'arrive à présent à vos deux petites fou-
gères. J'ai consulté l'herbier de Meaux, et je
trouve, à n'en pas douter, que la moins velue
des deux (the less hairy of the two, c'est le *Nephrodium*
lanosum Michx. Flor. Bor. am. tom. 11, p. 270 - Tab.
in montibus Janosii Tenasse et Carolina septentrionali —
Au contraire, l'espèce la plus velue (the more hairy,

est, selon toute probabilité le *Nephrodium rufidu-
lum* Michx. Flor. Bor. am. 11, 269, dont il dit:
"N. pusillum, totum rufo-villosum L. L. - affine N.
"lanoso". — Je dois ajouter que cette espèce manque
dans son herbier conservé au Muséum, ce qui ne me
permet pas d'affirmer ici aussi positivement que pour
l'espèce précédente.

Vous dites dans votre lettre en parlant de l'*Ap-
danthera undulata* "it has not yet fruited here"
mais il n'est pas nécessaire d'attendre la fructification
ou avoir un moyen de multiplier ces sortes de
plantes — Il suffit de recueillir les branches en une
sorte d'ange, et de fixer cette anse dans la terre, avec
un crochet ou dans un pot, pour la voir s'enraciner.



in this way - at least these means
succeed well with *Cucurbit. pepo*
mis. — It is a discovery of M. Mor-
lens of Montpellier.

Nous faisons tous nos efforts, M. Decaisne
et moi pour agrandir notre collection de *Cucurbita-
cis*, et déjà nous en avons un nombre considérable,
mais encore bien faible, comparativement à ce qui
existe de plantes de cette famille dans le monde.
Si vous pouvez nous envoyer les graines des *Bryonia*

Vous pouvez tenir pour certain que les *Sisymbrium*
tosellum et *tripartitum* sont d'excellentes espèces,
et parfaitement distinctes du *S. Lindheimeri*. J'en
ai cultivé quatre ans de suite, à côté de ce
dernier, et j'ai pu les comparer ensemble dans
toutes les phases de leur végétation. Elles diffèrent
de taille, de port et surtout d'inflorescence; les
fleurs d'ailleurs ne s'y ressemblent qu'incomplètement.
Ce qui n'est pas moins décisif dans cette question,
c'est que leur pollen est absolument incompatible sur
le stigmate du *S. Lindheimeri*, dont les fleurs, au
contraire, novent (grossifient) immédiatement sous
l'action du pollen de leur espèce. J'ai fécondé ainsi,
artificiellement, plus de 100 fleurs de *S. Lindheimeri*,
sans jamais échouer. Tous les essais de fécondation
par les 2 autres n'ont été suivis d'aucun succès,
donc ... &c.

Quant au *Cucumis melo texanus*, peut-être
avez-vous raison de le considérer comme étranger
à l'Amérique - Sur ce point j'hésite encore; la
question est difficile à résoudre.

Vous me parlez d'espèces nouvelles d'*Echinocystis*
récemment découvertes en Californie - Vous serait-il
possible de nous en envoyer des graines?

Veillez m'enfermer, cher Monsieur Gray, la
longueur tout à fait imprévue de cette lettre, et
agréer l'assurance de mes meilleurs sentiments,

Votre dévoué confrère, en Linnaeus,

J. H. Naudin

MUSEUM
d'Histoire naturelle.
CULTURE.

Paris, 20 Novembre 1862.

Cher Monsieur Gray,

Je viens de recevoir la lettre que vous
me faites l'amitié de m'écrire, et dont je vous
remercie; elle va prendre place dans ma collection
d'autographes, dont elle ne fera pas la pièce
la moins précieuse.

D'après ce que vous me dites, je vois que
la culture des Cucurbitacées n'est pas plus facile
à Cambridge qu'à Paris. Nous aussi, nous
avons une quantité de plantes qui poussent
quelques feuilles et qui refusent opiniâtement
de fleurir; ce n'est cependant pas faute de
leur donner des soins, car nous y employons
tous nos horticultural implements et le meilleur
de notre temps.

Heureusement, j'ai trouvé un moyen de
vaincre ces difficultés, moyen doublement excel-
lent comme vous allez le voir. Toutes les fois
qu'une Cucurbitacée se montre trop rebelle ici,

je l'envoie dans le midi, à Montpellier ou
à Hyères, à Hyères surtout, où des horticul-
teurs habiles veulent bien se charger de ce
soin. Depuis 4 ans, je m'efforçais en vain de
faire fleurir le *Cucurbita digitata*; de guer-
re lasse, j'en ai expédié une raisse à Hyères,
et en quelques mois la plante y a magnifiquem-
ment fructifié. On a réussi de même pour
une cucurbitacée de l'Amérique du sud, beau-
coup plus difficile à élever, et qui est le
problématique *Oleros* des Péruviens, *Melocoton*
des Nés guenadins, *Curua* des Brésiliens, et
certainement le *Cucurbita odorifera* de Vellozo
(Flor. flum. X, tab. 99), plante qui n'a depuis lui
été revue que par Hassk. et incomplètement
étudiée. Elle a admirablement réussi à Hyères,
ce qui m'a permis d'examiner attentivement
les fleurs et les fruits, et d'en faire des dessins
coloriés pour l'Herbier du Muséum. C'est une
succès de culture pour le ciel de la Provence,
pour une plante extrêmement rebelle à Paris,
ne vous étonnera pas, quand vous saurez que
le *Jacaranda mimosaefolia* du Brésil y fleurit
et y fructifie superieusement, en pleine terre,
en plein air, et sans aucun abri en hiver. Le
climat d'Hyères est à la fois si doux en hiver

et si chaud en été que la datte y mûrit quel-
fois aussi bien qu'en Afrique.

Je me donne beaucoup de mal pour tirer
au clair cette famille des Cucurbitacées, et je
me bécote d'un espoir ambitieux de lui élever un
Monument dans notre Muséum impérial. Toutes
les plantes qui sont cultivées ici avec quelque suc-
cès sont dessinées avec soin, analysées, dessinées en
couleur, fleurs et fruits, et en dessins soigneusement
accollés aux plantes, dans l'herbier. J'ai déjà
fait une certaine besogne dans ce genre, et j'es-
père, les circonstances aidant, pouvoir accumuler
ainsi une respectable masse de matériaux bien
élaborés, pour l'avantage de la Cucurbitologie
et l'agrément de nos Successeurs.

Je vous enverrai toutes les graines que vous me
demandez, sauf celles de *Wilbrandia* qui n'a
jamais été cultivée ici, et que j'ai seulement exami-
née sur de très bons échantillons d'herbier. J'y
en ajouterai même plusieurs autres, qui pour-
ront encore vous être utiles, ne fût-ce que pour
vous procurer, comme à nous, des échantillons
d'herbier irréprochables. Et tout ou à raison,
je regarde un Herbier bien fait, bien
complet, bien annoté, comme la base fondamen-
tale de la bonne botanique. On le reconnaît
tous les jours de mieux en mieux.

D^r H., for he is much impatient of being contradicted (this between us).

Il est certainement possible qu'il y ait deux espèces confondues sous le nom d'Echinocystis (Megarrhiza) Californica, cependant il ne faut pas oublier que beaucoup de Cucurbitacées varient prodigieusement! Il n'y a vraiment rien d'étonnant à ce que les Divers auteurs qui s'en sont occupés, y aient fait tant d'espèces de surrogation. Je verrai avec bien du plaisir les échantillons de cet Echinocystis dont vous m'avez fait le Dr Irving (auquel j'en adresse des à présent avec remerciements) veut bien me les faire passer. Un fruit ou une graine, avec une feuille et une inflorescence mâle me suffiraient, je crois, pour décider sur l'identité ou la différence d'espèces.

J'espère (Dieu aidant) élever un Monument Cucurbitologique dans l'Herbier du Muséum, où j'accumule le plus grand nombre possible de beaux échantillons, avec des dessins coloriés, représentant les analyses des fleurs et les fruits. C'est de la besogne toute faite pour nos successeurs.

Agitez, Cher Monsieur Gray, l'assurance de mes meilleurs sentiments, avec mon portrait.
Votre bien dévoué compère, Ch. Maquart

MUSÉUM
d'Histoire naturelle.
CULTURE.

Paris le 9 Mars 1863

Cher Monsieur Gray,

Je viens de remettre à la Maison Vilmorin-Andrieux et C^{ie} une boîte contenant des graines et des tubercules de Cucurbitacées, qu'elle vous fera passer à la première occasion. Dans le nombre, il y a quelques uns des hybrides que j'ai obtenus, j'ai pensé qu'ils vous offriraient quelque intérêt. La plupart de ces Cucurbitacées ayant été cultivées au Muséum, avec succès, j'ai lieu de croire qu'elles réussiront au moins aussi bien chez vous qu'ici, votre climat valant probablement mieux que le nôtre.

J'espère avoir, à la fin de l'année un grand nombre de Cucurbitacées nouvelles

à désirer, car nous avons reçu de nos nombreux correspondants, dans les différentes parties du monde, un très riche assortiment de graines, que, pour plus de sûreté, je vais faire cultiver sous le climat semi-tropical d'Hyères, en Provence. Vous jugerez de la bonté de ce climat, pour les expériences botaniques, par ce fait que le *Livistona chinensis* y a abondamment fructifié en 1862. Votre superbe Palmetto des Etats du Sud y réussirait magnifiquement, malheureusement de cette belle provision de graines, que vous nous avez envoyées il y a quelques années, nous n'avons pu obtenir qu'une demi douzaine de jeunes plantes. Je crois que les graines avaient été cueillies avant leur maturité.

Il serait intéressant au plus haut degré, pour la question de la Variabilité des formes spécifiques, que des expériences fussent faites simultanément, sur les mêmes plantes, en Europe et en Amérique, car je crois (sauf erreur) que le changement de lieux

et de climat est une cause très fréquente de variabilité, mais ce sujet n'a jamais été étudié avec suite, ni surtout assez long-temps, car il ne faut pas perdre de vue ce fait que plusieurs générations consécutives sont ordinairement nécessaires pour qu'une variation sensible se produise. A ce propos, M. Decaisne me charge de vous demander ce que vous pensez, Des arbres fruitiers d'Europe transportés aux Etats-unis, et reproduits de graines, tels que le prunier, le pêcher, l'abricotier &c. Les fruits se font-ils modifiés sous les nouvelles conditions, et s'y font-ils améliorés ou déteriorés? On nous parle beaucoup des pêches et des prunes américaines comme étant le Me plus ultra de leur genre, est-ce vrai? Nos légumes communs, Choux, carottes &c. sont-ils tels en Amérique qu'en Europe? Les poires et les pommes, les figues et les olives, y ont-elles conservé leurs qualités?

Votre petite note relativement aux assertions de M. Planchon, a été traduite, et sera insérée dans un des prochains numéros des Annales. This will bear hard upon

I'm giving special attention to grasses & sedges; do not find much time to devote to other botanical orders. I hope next year to make a large coll. of plants in So. Eastern Texas. What I collected this year were only in occasional trips here & there.

Very truly Yours

G. C. Kealley

I will be here in Beaumont through this month.

List sent
to Beaumont
Feb 10/85
from G. C. Kealley

Beaumont Tex. Dec. 11, '84.

Dear Sir

I send in this mail a package of specimens for name. I wrote you about three or four mos. ago, and you kindly agreed to give me the names of what I might send. I intended to send them before leaving the College last Oct. Took them with me to Houston. While there I made some arrangement with Dr. Joor (Asst. Commissioner for the Exposition) about having some grasses & sedges on exhibit. I sold him 220 specimens; making with those he furnished about 300. He has had them framed. So there will be a pretty fair exhibit at the Exposition, of Texas grasses & sedges.

As to the specimens I send, A, B, C, D, E & G, are from Hardin Co. up in the longleaf pine belt. I gathered B & D in Apr. G in May, and A, C & E in June. F is common about Beaumont in the swampy lands; in bloom in April & May. H in bloom about here through

Kealley

June, growing by the side of pools & ditches. It is common in the swampy lands here. Seems to be in its prime in July. K is from Sabine Pass. While there early in July I found this one plant growing in the sand. L, M & N are from the long-leaf pine belt; N in bloom in May, and the other two in July. O, I found near Beaumont in a thick grove, growing among the pines (Loblolly) & magnolias. It was in bloom in May. 1, 2 & 3 are from Sabine Pass collected last July. 7 is from same locality. 4, 5, 6 I found about here last July; 5 by the border of a grove, and 4 & 6 by the side of the r. r. track. 8, 9, 10, 12, 13 are from the long-leaf pine belt. 11 I found in a shady ravine near here last July. 14, I found growing about Houston a month ago. 15, I collected at Sabine Pass in July. 16 grows in the woods here, in bloom the latter part of Apr. 17 is found in the fields about here, in bloom in July. 18 is in bloom at the same time, up in the long-leaf pine belt. 19 grows in the swampy land here, in flower through July. 20, I take to be a Crotalaria. I found one specimen in a field here last July. 21 & 22 are found in grassy places here in bloom in June. 23 is from the long-leaf pine belt, blooming in May. I have other specimens I thought of sending.

Del Rio Val Verde Co. Tex.

May 24, '87.

Prof. Sereno Watson

Dear Sir

I received your letter of Apr. 23, a day or two before starting off on my expedition westward. I will not be in Orange Co. again, this year; so I will be obliged to wait until next year before collecting that white Rio. It was just about this time of year that I found it.

I travel on to Western Tex. collecting mostly grasses, as to Dr. Vasey's instructions. Though I get a sample or two of every species of plant I see.

Yrs very truly

C. C. Walley



Breslau den 7. Febr. 1829.

Monsieur,

J'ai reçu, par les soins de M^r. Lehmann, votre beau traité sur les
Melanthacées de l'Amérique septentrionale que vous m'avez fait l'hon-
neur de m'adresser, et je vous l'en agée mes actions de grâce les
plus profondes.

Permettez que j'ajoute quelques petits mémoires tirés de l'histoire
Naturelle. En. et croyez-moi toujours

Votre

Très dévoué serviteur
Herr d'Orsbach

à Monsieur
Monsieur Dr. Gray
à New York

Breslau le 15 mars 1842.

May 30 1842

Monsieur et très cher Collègue !

J'ai reçu votre beau mémoire sur les
montagnes de la haute Caroline, et je vous
prie d'être assuré de mon sentiment de
reconnaissance le plus sincère. Vous êtes
très heureux de pouvoir faire de telles ex-
cursions botaniques dans votre pays qui
vous offre à chaque pas des richesses nouvelles.
J'ai joint à ma lettre un exemplaire du
Supplément 2. du Vol. 19. de l'Atta
lued. Nat. Cur. destiné pour votre bibliothèque.
Agréés, Monsieur, l'assurance de la plus
haute considération et du dévouement
avec lequel je suis

Votre

très obligés serv.

leur

Herr d'Erben

* ainsi que la note de
Mr. Lindland sur les trois
nouvelles plantes de l'Ohio
central.

K. L. C. Akademie der Naturforscher

Breslau, den 19. Apr. 1848.

Herrn Dr. Asa Gray,
Corresponding Secretary of the American
Academy of Arts and Sciences.
Boston and Cambridge
North America

Für das sehr werthe Geschenk, welches die Akademie der
Wissenschaften zu Boston, der Akademie der Naturforscher mit Ihren
Memoirs, new series, Vol. 2
Proceedings 1846 fol 1 - Abjunct
1847 - 7 - 1847

gemacht hat, erstatte ich hierdurch im Namen dieses Instituts den
verbindlichsten Dank.

Der Präsident der Akademie.

Herrn Cronbeck

Wegen Verspätung der dankbaren Meldung des Empfangs obiger
Werke bitte ich um Verzeihung; es war ein Versehen unserer Ge-
schäftsführer bei der Bibliothek. Auch der werthe Geschenk Ihrer
Chloris borealis - Americana habe ich richtig erhalten und ver-
muthlich meinen Dank dafür an Herrn Sullivan ausgedrückt,
welchen die Akademie zu Ihrem Mitgliede ernannt hat. Für das
über die Proben, welche Sie mir mit Sullivan's, Musci and Hepaticae of the Northern
United States geschickt haben, sage ich herzlichen Dank! Herr Cronbeck

Dr. Eliza Gray, Corresponding
Secretary of the American Academy
of arts and sciences

Boston and Cambridge
North America.

a thing new to me, and no where noticed that I know of. It was
a mere accidental variety for in the same vine I found fruit
marked merely by stripes of light and shade and fruit decay-
forming. This is a very trifling little thing - but I confess when I
first discovered it, it delighted me exceedingly as I am always alive
to the merest hint, even that affords in connecting one family of
plants with another,

With much respect

Doct^r Asa Gray
Cambridge Mass

I remain Yours &c

Eng^l H. Reiser

Columbus Geo. 29th Nov. 1856.

Dear Sir

I last week received the sheet of the American Journal
of Science and Arts containing your note on the flowers of *Archies*
for which I am much obliged to you. I thank you, Sir, for having
set me "straight" before the readers of the Journal and Mr. Ben-
tham as well, for the frank and honest manner in which he has
acknowledged his mistake.

In a note, *Flora N. Am.* Vol. 1. p. 282. it says "Mr. Benthams, who
suspects the legume of *Erythrina* to be indehiscent" &c. The legume of the
E. herbacea, as it grows with us is dehiscent, As soon as the seed
it opens widely - but if undisturbed will hang on the stem during the
whole winter, the seed attached to the valves all the while. Doct^r
Torrey was inclined to the opinion of Mr. Benthams, from his having a
specimen, in which the seed were bright scarlet - but still the legume
showed no disposition to open - until I sent him a handful.

I have suffered from the want of means of literature and science that
I labour under very great disadvantages, seldom meeting with any one
with whom I may converse, having few books to consult, I am ^{often} ~~seldom~~
unable to follow at any subject with much success or satisfaction. - Such
being my situation I am sometimes constrained to seek for information
from any source where there is a good chance of getting it without much
regarding the conventionalities that would restrain me many times in
involving himself upon another to whom he is an entire stranger.

any intrusion in your case, has been met so readily, so kindly
that like the beggar who is sure to return to the gentleman tomorrow,
who gave him a penny to day. I will ask you, if not too much trouble,
to inform me of what countries the *Popillora incarnata*, is known to
be a native. From all that can be gathered from the few botanical
works which I possess or to which I have access, one would be led to
suppose that it is a native of the southern United States but
strictly speaking, and so far as I have been able to discover this is
not the fact. It is never found wild in the woods, but only in cultivated
lands, to which it is almost exclusively confined. It even being
a rare thing to find a solitary, straggling plant in the most dense
in the vicinity of fields. I have been acquainted with the plant
all my life, and this point regarding it has been a subject of spe-
cial observation not only in Georgia but in other adjoining
states. I have diligently enquired of the botanists whom I have
met as well as others who I thought might give me informa-
tion on the subject - but I have not met with one man yet who
had attended to the matter at all whose observations did not
accord with my own. When new lands are cleared up it does not
begin to appear until, most commonly, within three or four years
and as the land is exhausted it increases until it becomes the
sole enemy, almost against which the cultivator has to contend.
But if cultivation is abandoned, as *Broom grass* and *Barns*
take possession it disappears and in a year or not a trace of it
is to be seen - tho again to spring up if the ground be over-

act and cultivated. In searching for information about it, I met
with Capt. Barcay's account of the Exploration of the Red river of
Louisiana, in which page 78, he says "He also found the wild
poppy flower, *Popillora incarnata* -" but this being near the
village of the Wicheita Indians. leaves room to suspect that
the plant is common by the same law there as well as is. I regret that
I was unable to get but a very few of the reports published by Emory
of the explorations of our western territory. I might have found some-
thing of interest among them.

The flowers of this plant, are sometimes white, a fact noted by
Baton. *Mem. Bot.* p. 344. & ed. but by no one else that I have seen.
It is however exceedingly rare to find them so. I have never met with
them but once and that under circumstances, rather singular. In
a farm of my father's near Athens Georgia, many years ago, there was
in the midst of a field a plot of ground probably ^{fifty} feet square which
grew white. "May poppy" exclusively, not a blue one among them, white
all around they were blue, and not one white one. the two colours or
rather the two plants being rightly blended around the edges of the
plot of white flowers. I could never find a white one elsewhere
on that farm or the adjoining ones - in fact it is the only place I
ever saw such a thing. To the best of my recollection there was no
other difference in the plants - nor was there any gradual transi-
tion in colour of the flowers -

A few miles above Columbus in Alabama some years since I found
in one locality this plant being fine, beautifully coloured, fruit

Columbus Geo. 19th Dec. 1836

Dear Sir

Your favour of Dec. 24th was duly received - I am obliged to you for your intention of complying with my request - I have already studied the *Arachis* closely for several seasons, but still, shall make it the object of careful study each succeeding summer. I doubt much however, whether it will be in my power to get drawings made of its fructification - No, I see its importance - from the difficulty I find in making myself understood by words there is some misapprehension relative to the plant somewhere - I scarcely think that the account given of its fructification by Mr. Bentham in article published in the *Am. Jour. Arts & Sciences* for Sept. is strictly applicable to the plant as it grows with us. Could the difference in climate between Columbus & Leipzig make a difference in its mode of growth and flowering? I should scarcely think so - Further Mr. Bentham as quoted by Doctor Torrey in his letter to me at the beginning, says - "The fructiferous flowers consist at first of a minute ovary on a very slender stalk - I have seen no such thing in our plant. The minutest ovary that I have found naked and from which I have not a doubt the calyx and corolla had fallen, was absolutely sessile - It reached the earth by a gradual elongation, the ovary concealed at its point and readily detected by a common pocket lens. From the comparison he institutes between the flowers in the upper and lower axils - one would be led to suppose, that this like most of our native plants, grew until as it were it had arrived at puberty and that then the flowers were produced generally over the plant with ordinary rapidity of succession. Such is not its habit. It begins to flower early in the season, blossoms appearing in the first axil of each branch as soon as it is developed, and as each successive axil appears it is followed by its small raceme of flowers, and so one raceme

after another, till both its growth and flowering are stopped by frost. Hence we cannot with propriety speak of upper and lower axils in the sense in which he uses the expression for what is ^{upper} ~~axilla~~ axil to day and in a few weeks may be ranked among the lower from the development of new axils above it. In fruit there is scarcely a difference from one of a branch to the other except at the extremities, where the fruit becomes tip and tip lateral lobes and tip developed down to unopened buds, which have been stopped by frost but which would have perfected fruit if the season had continued in fact in this climate it never arrives at the term of its growth. In the very poor specimen I sent you, taken up in July, these upper axils filled with flowers in a few weeks would have shown fruit.

By diligent search I have found two specimens that may throw a little light on the subject. One is a withered flower that had fallen - you can readily see the enlargement of the lower part of the calyx where it embraced the ovary which it left behind and that the ovary did not fall off with it.

The other is an ovary considerably elongated the flower has mostly disappeared, but fortunately a portion of the calyx is left in situ, now it is only "apparently adhering to, but not connected with the point of the fertilized ovary", accident has more ability to simulate nature than I had supposed. When this was in flower, the more conical point with its calyx and corolla was all the flower, when the ovule was fructified the ovary commenced lengthening as you see in search of the earth, the ovule may no doubt be found at the extremity. This is the best I can do until next summer, when I can get as many as you may wish bearing the whole withered flower on their points.

With much respect

Yours for Gray
Cambridge Mass

I remain yours &c

Hugh M. Webster

and such facts often give ^{me} a ready reply to the Utilitarian's question
of "Qui bono?" when he sees me poking thro' the words-making collections
and wonders at my folly!

I duly received your paper on the "Statistics of Plants of N. H." which interested me and for which I am much obliged to you.

With much respect I remain

Doct. Asa Gray }
Cambridge Mass }

Yours &c

Wm. H. Miller

Columbus Geo Dec. 23rd 1856

Dear Sir

Yours of the 12th inst. was received on the 18th but an absence from home of some days has prevented my replying sooner. I will cheerfully aid you with any information that it is in my power to collect, and will send you a copy of the list of our birds, and a list of our introduced birds so far as they have come under my observation. There are matters connected with the appearance and disappearance of some of our wild plants, which have interested me much and to which I may have occasion to refer hereafter.

I have now three or four ripened boxes of *Sorghum halepense* with seed which I will send you the first opportunity. If there was some one in New York to whom packages for you might be left, I could meet with frequent opportunities of sending you parcels. Some years since I sent a Doct. Torrey specimens in flower and fruit of an Iris which he thought was new. I think he told me that he divided his specimens with some of those specimens on the other side of the Atlantic, perhaps only one that are yet left in the only box by that name on our side. Finding it and it is there fast. I tried its cultivation this year, but all my plants died. I wish to send it to you at Cambridge, we would then stand a better chance of preserving it.

As to the *Sorghum halepense*, the report of my observations and inquiries for many years past, are as stated in my former letter - it is found in more isolated open lands than in any other. It is not found in wild lands at all so far as I can discover. I once thought it possible

that it had been brought from the southwest in times long past by a people more civilized than our Indians. just as was the common gourd the *Chicasa plum* and perhaps others. But, if no home can be found for it and we come to any conclusion that it was introduced in the southern states - it is certainly a matter it presents an exceedingly interesting anomaly. The probability of its being such has often occurred to me - and that it might be that the seeds were lying dormant in the earth - but when the ground by clearing and culture was brought to a condition to favour their growth they spring forth as they do. There are we know cases of this kind fully established. it may be so here - Whether or not the Indians ate the fruit I am unable to say from personal observation - I presume however they did, as it is now commonly eaten by us - indeed, I regard it as far the most delicious of our spontaneous fruits.

We have many common weeds but I think the greater part of them have been introduced. I will when you wish it look over them carefully and send you the result. Of the native plants that have increased in number and area as the surface of the ground has been changed by man, there are quite a number. Probably the most remarkable one for its spread where the land has been cultivated is the *Andropogon Virginicus* (Michx.) In wild lands it grows in thinly scattered clusters, where the soil is poor and sandy, but when the ground has been cleared up, cultivated, worn out and abandoned it is immediately taken possession of by this plant and is kept by it until driven out by briars and bushes. I have no doubt there are millions of acres of land in the southern states covered by it. Quite a catalogue of plants one should be able to select and increase around and in all

ted lands might be made out.

A few days since I became acquainted with a fact altogether new to me relative to the *Indigofera Caroliniana* (Nutt.) a common weed through our poor pine woods. The people in many parts of Southwestern Georgia use it entirely to the exclusion of the exotic *I. tinctoria*, tho the latter can be raised with little care or trouble, they consider it as affording a better colour - and every season turn out in the woods and collect it in sufficient quantities to answer all their purposes. If this fact were generally known - and well conducted experiments prove the correctness of the opinion of the people, it might bring about a great change in some parts of the country, by rendering immense tracts of land valuable by its production, which we at present use for no purpose that we know. Speaking of dyeing I may as well mention in this fact or two that I might hereafter forget. The people in the pine woods use and they use the inner bark (liber) of the *Pinus palustris* for dyeing wooden a reddish brown - and which is the same as the bark of the *Pinus strobus*. ^{namely} that the bones of the fox squirrels that live on these trees, eating the buds and tender bark of the young branches are entirely red - so that they are generally known as the "Red boned squirrel".

The *Coreopsis scirifolia*, popularly known hereabouts as "Egg dye" is another plant that comes into the domestic economy of our country people. - They use it for dyeing yellow. Its common name arises from the children's using it for colouring the eggs that are in request for their past-times at some seasons. These things may already be known to you - but in case they are not - will be I suppose ~~the~~ interesting - I take great interest in collecting such things

bags and drained till dry - it is then used as the ordinary article. Those who have used it most insist that the colour is better and more permanent than that of the exotic Indigo - that a given quantity will go further - i.e. dye a greater quantity of cloth or yarn and that the weed in a given weight will yield much more dye - They are in the habit of cutting three or four times in the season from the same root. Sometimes too, they gather the seed and scatter it in convenient places - where it will flourish and yield a supply for years - If a series of carefully conducted experiments were made it seems altogether likely that this might be added to the other profitable crops of the South - with this great advantage that it would be produced on lands now waste & useless for any other purpose -

Doct^r Asa Gray }
Cambridge Mass. }

With much Respect

Frederick J. Gould

Hugh M. Reider

Butler Taylor Co. Geo. ...

Your favour of May 1st was duly received, I am as usual obliged to you for your kindness. It has always been a great difficulty with me in Botany, the making due allowance for variations from typical forms - and readily recognizing a species in the different forms under which it may often present itself. For a month or two I have been bothered by a case of the kind -

It must be the *Viburnum pubescens* - but the leaves are perfectly smooth on both surfaces, save a few scattered hairs on the mid rib and veins beneath. In the only place I have seen it, it grows about three feet high, forming a small thicket on a rich shady, hill side near a small stream - leaves ovate, or ovate oblong, often slightly cordate, somewhat acuminate, coarsely and irregularly dentate smooth, the nucleus is not yet hard - but the fruit nearly grown I suppose, is much compressed, convex on one side, with two longitudinal depressions on the other - presenting such an appearance as we might reasonably suppose would result from a nucleus in

"much compressed, slightly two grooved on one side, obtusely ridged on the other" but, the species is said in the *Southern* states to be confined to the mountains - and this is another trouble.

I am again sometimes pestered by finding peculiarities in plants noticed in the books. - In the leaf of a *Saccharinia* which I enclose - which is a young one of *S. subra* - I found them growing in tufts on a spot of ground that had been burned over

early in the spring, I was much puzzled in determining to what species it belonged, indeed I never should have found out if chance had not showed be a tuft - in which the tree had spared the central portion - consisting of a few last years leaves and the scape in flower - these were surrounded at base by numerous young leaves of this form - which I never could have thought would change so much in becoming full grown - The little, almost leafless, dichotomous concern that you find within I have given up in despair - I have sought diligently but am unsatisfied - it belongs I suppose to the Caryophyllaceae, it is pentandrous - trigynous - capsule membranous three valved seeds pyramiform roughened - with small pits - &c. I expect you can make it all out from the specimens, as I send it both in flower and fruit.

A few days after your letter I received from Columbus, your article from Tullimier's Journal - on the Flora of the Northern U. States. It has interested me very much, the more so, as for some years past I have been comparing the Flora of Columbus ^{so far} as I was acquainted with it, with that of the West and South West - and many interesting facts presented themselves - but a want of books prevented my making the comparison as far as I could wish - the Flora of North America being my ^{sole} dependence. A good many Western plants turned up there, that I never found or heard of else where in Georgia - I am very little acquainted with the Pines of Georgia I don't know a single species of the up country except the White

Pine of the mountains - around Columbus I know the *P. palustris* and *P. taeda*. v. *heterophylla* - There are I think two or three others but I never made them out. One a short leaf pine with rather small cones, growing along in the lands bordering on the river where the soil is composed of the detritus of granitic rocks - and which occasionally hybridizes with the long leaf pine. I know two places where there are trees that combine the distinctive features of the two species in a remarkable manner. These trees are so large that the flowers and fruit are not always attainable when a person feels disposed to study them - may be one reason why I know as little about the family as I do - Our oaks, hickories and many other large forest trees have escaped me in the same way - to a great extent.

You probably recollect my mentioning some time ago that the country people in this region were in the habit of using the *Indigofera Carolinensis* in place of the *Indigofera tinctoria* - I enclose a bit of cotton yarn of cotton that has been dyed with it. To me the colour seems good - The old wives just at this season when it is beginning to bloom collect from the woods as much of the plant as they can procure - they steep it in water some twenty four hours until it assumes a greenish tinge - when it is drawn off and the liquor diligently churned until it assumes its proper blue colour - it is then curdled by the addition of a small quantity of ley from wood ashes - and allowed to settle - when the water becomes clear, it is drawn off - the mud collected put in coarse

Butler Sea, June 27th 1857

Dear Sir

Your favour of 20th Inst. was received this morning, I thank you for the information imparted - Strange as it may seem, my difficulty about the *Stipulicida* originated from my never having found the radical leaves!! I had thought it without them altogether. On reading your letter I went out and collected specimens - I found the radical leaves it is true, but in every instance ^{they} were withered and buried in the sand - and I have no doubt such has been the case from the time the plant first attracted my attention, hence my failing to see them. As to the seed I have reexamined them - I do not find myself sustained in the impression made by my first examination - however, they are certainly not in the *Stipulicida* seems to be covered with a series of longitudinal and transverse wrinkles so that its surface is also a multitude of little, irregular, figures with their size as slightly affected differing much from the ribs observed in the seed of some of the *Caupogonaceae*. I have never seen the flower so widely expanded as they are represented in the plate you sent. I have always found them almost closed at all hours of the day and at all stages of their growth. I send you the *Biburatum*, with a few berries gathered to day in which the nucleus has become hard. Also some leaves and fruit of another (I will put in the flowers too if I can find them, as I have some dried somewhere.) the only place I can find for this is *P. angustifolium*. under *U. nudum* - tho it seems to me to differ very widely from that species as known to me, in fruit, in leaves and general appearance. It grows in clusters, in the water

of our shallow creeks. We have still another, differing a great deal from this - but growing in similar situations - it is not within reach at this time.

The trouble with one about the leaf of the *Saracenica* was the very small tube and the broad lanceolate appendage - in the full grown leaf you know, the appendage is very narrow and linear - changing, I suppose, as you get to the dried specimen, in flower with both forms of leaves growing from it. I will try and save it for you. About the Hybrid pine. I will tell you, close along the river where the soil is made up of the detritus of granitic rocks. The growth is made up of Oaks, Hickories, Dogwood &c with here and there a pine, (I know not what it is) with short leaves, covering the smaller, terminal branches; with cones less than a hen's egg - growing mostly in clusters of three four or five and often more. Next to this narrow strip of land comes a soil composed of silicious sand with a little clay mixed up with rounded flint pebbles - the undergrowth is various kinds of oaks, hickories, persimmons & the only large tree the *Pinus palustris* - with very long leaves, clustered at the ends of the branches - with very large cones - often solitary never more than two or seldom three together - Now, where these different soils and growths meet - in two places I have found pines, with leaves rather short, clustered at the ends of the branches - with ones of an intermediate size in between - to my mind clearly combining in a considerable degree the characters of the two common kinds - hence I thought them Hybrids - They grow a few miles north of Columbus - I will endeavor to get some one to collect such specimens as may establish the point. If I do I will send them to you. As to the Indigo - I think myself that the facts I have collected are interesting and what is more, promise to be of much practical importance, thin-

ing so. I stated the facts to the Commissioner of Patents, supposing, that he might regard it as a matter of sufficient importance, to be inquired into a little - But he has preserved a disguised silence - even until now -- and I have no means or time to spare in experimenting on a matter, that, let it turn out as it may, cannot possibly benefit me any - thus it lies - They will pick it up some day or other I suppose -

I am very unfortunate in preserving Botanical specimens - four or five years ago I promised to collect some plants for Mr. Olney of Providence and would you believe it - I have not sent him one - Dr. Chapman has been treated in the same way - I am mortified exceedingly - I have gathered many a one but some way or other they all spoil - I cannot attend to them - I keep on trying tho, and pick up and put away every thing that I think looks strange or curious -

Yours &c
Cambridge Mass

With much respect
I remain yours &c.

Hugh M. Kissler

Butter Geo. July 11th 1857

(Dear Sir

Yours of 8th inst, was received this morning -
I am again obliged to you for your kindness - I only fear that
I shall weary you or interrupt you too much by my frequent
calls upon your time and attention - It would probably be better
if I could collect together every thing that may present difficulties
or points of interest, and forward them after they accumulate,
but, my mind is of such a cast, that if it once gets hold on a
thing it cannot be given up - until the difficulty is overcome or
a conviction that the matter is beyond its own reach and of as-
sistance too - While you please let me know the difficulties in the
way of making the notulifera a variety of juv. res.
I wish to learn how far to make allowance for variations from types
of species. Or is that thing unattainable without having series of spe-
cimens, showing the gradual and insensible change from the type
of the species to the given variety? As to the Hybrid Pine, "Does it
ripen seed?" I presume it does - as it forms cones, which hang on just
as on the other pines - Tho if they do I do not see that this - in this
case, can be used as an argument against the belief that this tree is the
result of the mingling of the two species - I was in Columbus last week -
when I saw the tree and not having time to go out to either
of the places where they grow I got the promise of two gentlemen to se-
cure me specimens for your use - if in their power - If they get them

not I will make it an especial business to, after them myself
some day. if I do not find them in this county which I may do -
I have just been out to examine the lower leaves of the *Viburnum*. I find them
generally more coarsely toothed and disposed to become three lobed. I en-
close some just-gathered and the most deeply divided that I could find.
On page 77 of Mersey's exploration of the Red River of Louisiana - when
on the site of some deserted villages of the Wichita Indians - he speaks of
finding the *Popillia incarnata* - are there any means of learning whether
he found it, clearly a native inhabitant of the woods or, merely growing
in the old and deserted fields, as with us? That plant is still an object
of interest with me. In mentioning the plant before - there was a fact or two
connected with it that escaped me - There is a locality near Columbus
where the fruit is torulose. The not uniformly so, as on the same vine may be
found fruit merely studded with a darker green and others as regular
as a Musk melon. The plant presents no other peculiarity. The flowers too
are sometimes milk white - which Eaton mentions in his allusion - I never
saw him but once and that under circumstances rather peculiar.

Is the enclosed plant, *Paronychia hernarioides* Nutt.? it is the only
thing I could make of it. If I am correct it differs much from the descrip-
tion in Flora N. Am. as well as in Elliott. it is not prostrate as there
described - but erect and dichotomously branched - nor have
I been able to find it otherwise - I could not make out the parts of the flower
altogether to my satisfaction - but after examining it the best I could, the
impression left on my mind was, that the petals, or rather their representatives,
and their arrangement agree more nearly with the description of these parts

in *Lophosyris* - but I cannot speak yet with certainty.

A few days ago I got into the original locality of the *Hypoxis aureum*. But
where it was first found by Bartram, Baldwin, Boykin as well as Elliott on
his tour thro the western districts of Georgia and Alabama - between Flint
river and Patosliga creek - I had found it six or eight years ago near Co-
lumbus, there it ^{is} as far as I can discover ~~it is~~ confined to one, small rocky
island two or three miles above town - here I found it not only among
the rocks near the streams, but along fences and scattered thro the
woods; how far it extends up the river I am unable to say - but I know
it to be found but a little way up the creek. It was pleasant to wander
through woods that had been trodden by such men as those mentioned
above.

Would you like to have specimens of the other *Viburnum* we have?
it is, I suppose but a variety of the *V. ovalum* - I have none of the flowers.
I can get the leaves and fruit.

With much respect -

Doct. Asa Gray } I remain Yours &c
Cambridge Mass }

Hugh M. Reidler

Butter Geo 23 August 1857.

Your favour of 20th ult. has been on hand some weeks. I was of the opinion at first that the plant I sent you was Tronghia hernarioides - but its mode of growth presented a difficulty that I could not get over - afterwards in attempting to examine its fructification minutely and which I have not yet made out to my satisfaction - I thought I had discovered other difficulties - but I am much inclined to believe that I did not make out the thing correctly. I find it difficult to find such specimens as you wish. the capsules seem to split and shed their seed so soon as the flower withers. I have looked at numberless plants but I never find them properly procumbent. Its habits are peculiar and I will try in the best manner I can, to give you an idea of its mode of growth. The stem when it springs from the ground is twice dichotomous - from the four secondary divisions of the stem, spring the branches variously divided in a diffuse manner with their summits festuigate - so that the top of the plant as you look down upon it generally presents a very regular square or parallelogram - pull it up and lay it on the ground, roots upward - and these four secondary divisions of the stem present the four angles of a very regular square or oblong parallelogram as the case may be. Now, it sometimes happens that the stem divides just at the ground and the branches much divaricate, in this case the whole plant seemingly rests upon the ground, but still is really not procumbent. Again, it sometimes happens that the stem does not divide until

it is three or four inches high - in this case in a little while the plant may become top heavy and ~~the plant~~^{it} will fall over on its side - Some times too one of the primary divisions of the stem is suppressed or partially developed in this case the other necessarily falls over and rests on the ground as it grows. These three cases are but exceptions - for in nine plants out of ten I find them all upright and the branches clear of the ground. I will send you fruiting specimens when I can get them. The *Viburnum* berries are not quite ripe - tho I suppose they will do. The shrub is very scarce - I find but one place in the whole country where it grows - I find that few of the flowers perfect their fruit.

I enclose a specimen of *Barua cuneifolia* - you see, as it grows with us the flowers are purple and not white as stated in *Flora. N. A.* and Elliott's "calyx very minute" is a mistake - The anthers after shedding their pollen are revolute - and deciduous - leaving the filaments to wither and fall with the petals and sepals.

Is the other plant enclosed "*Lechea thymifolia*, Pursh.?" - I judge it to be that - tho it does not seem to agree accurately with the description - The plant in its mode of growth differs much from the *Lechea* I was wont to be familiar with over at Columbus - tho my recollection may be at fault.

This is the first opportunity I have ever had of studying our sand hill plants - and I have been much interested and not a little gratified - I hope to work thro them tho.

Writing thus far I was interrupted, and an idea struck me that I would take another search for the *Viburnum* - and succeeded in finding it

in a new place a quarter of a mile or so from where I first found it. There it grows, its itself a little differently. The leaves were more commonly lobed - ~~many~~ on many individuals all the leaves being so - in others none of them were lobed not even the lowest - I observed here too the leaves on some plants much more narrowly ovate than I had ever before seen - so that the leaves vary far more than I thought - at first indeed I was not aware that they were ever lobed - tho after a while I discovered it occasionally in the lower leaves of some, not many individuals. The question about it now, I think is narrowed down to this - is it *V. acnifolium*? If not, it must be new - I for the first time to day observed the stipule like appendages near the base of the petioles, as described in the species last named - but - the varying leaves, the want of pubescence beneath, the globose fruit - seem to distinguish it from that. However - having to depend on descriptions alone I am by no means competent to decide the point. One of the specimens sent is from a shrub in which all the leaves were lobed -

I have since become pretty well satisfied about the *Lechea* therefore do not enclose it. I will get you some seed of the *Hypericum* if I can - Did you receive the *Erythrina* seed I sent long since - I now have a small quantity of seed of *Eschscholium incarnatum* - would they be of service?

With much respect.

Doct^r Asa Gray?
Cambridge Mass?

I remain yours &c
Hugh M. Foster

Butter Geo

1837

(Dear Sir

Your favour of 17 inst. is at hand, I wish to know in what manner I shall forward to you the few specimens I have collected for you. There are not many species, but it was the best I could do this season - as to the next we will see. I have concluded to set up my household gods permanently in this region and for a time at least, my business will be such as to favour rather than interfere with my tastes - so that if not very injudicious, I shall enable you to do justice to the plants of this vicinity, at least.

I had examined the plant retailed which you wish to be informed, concerning the *Sistris* I forwarded to you - previous to sending it - in no specimen I have met with, does it vary in the slightest degree from the specimen you received - it was that fact that induced me to suppose it might be new. I have met with no plant here that answers closely to the description contained in Flor. N. A. I have since found it in one other place near Butter - and also east of Flint river. I now suppose it may be scattered about extensively tho very sparingly in all places I have seen it except on the Patuxent where it is abundant.

Some time during the winter, when I feel like writing I will comply with your request concerning the same - to me it

least it is very curious and interesting - how it will prove to others I can't tell - I am not able to distinguish the *Wana* since it is out of flower and have not yet collected a seed -

I enclose a few leaves of a *Coccoloba* that differ considerably from those of our common species - I know nothing of the flowers and fruit. The tree is singular here as being the *Coccoloba* in this country is regarded as an indication of fertile land and is found growing chiefly on the rich hill sides or bottoms near our larger streams (I speak of me of my own observation) this on the contrary I found on an elevated table land. between the head waters of the Patoligo and Big White-water Creeks - a sandy place, as poor as it well can be, covered with a growth of dwarfish pines, *Quercus laevis*, *L. nigra* and a few scattering white post oak bushes - the herbage a few *Andropogons*, *Solidagos* and such things. I was astonished to find it there, but in visiting two hundred yards I saw probably a dozen. I have since learned that the place is known through the country as the "Cherry flat". The body of the tree itself is black crooked and misshapen and is little like a cherry, but at eight or ten feet from the ground it puts out its long, neat, slender branches that a practiced eye can recognize at once.

I thought the *Euphorbia* was *E. herniarioides*, Nutt. - but then the rich alluvial bottoms of the Ohio and Mississippi I saw it; though a probable locality of a plant that here is not found, but in the very poorest of our sand hills - being only particular

in selecting those spots where moisture is inclined to linger. - I was in Columbus not long since and secured the assistance of a friend to secure me specimens of the pines of the vicinity, he is of my opinion relative to the Hybrid I spoke of. I fear he will not get specimens from the trees I so well saw and in which the peculiarities of the two species are so nearly blended - I have a few of the pines from this region. I think it may be three species besides the *palustris* - I have not been able to make out the Hybrid clearly, along Flint-river, as I expected - tho I have had an opportunity of making the search at but three points - I may come up with it yet - for if it be such it is reasonable to expect it at any point where the long and short leaved pines grow in close proximity.

With much respect,

Wm. L. Asa Gray.

Wm. L. Asa Gray.

I remain yours &c.

Asa Gray.

Butler Geo. 23 Nov. 1857.

Dear Sir

Enclosed is the leaf of an oak that is new to me and does not altogether agree with any description within my reach. The country on the east of Flint river is an elevated table land which suddenly sinks, by precipitous steep into the low lands bordering the river - on these precipitous steep it grows - but no where else that I can discover. The tree itself is of the ordinary size of oaks - beginning to put out long horizontal branches at right angles from the trunk and several, some thin & not, but high. The bark is brown, smooth, covered with very minute, closely appressed scales or lenticles. than covering the base of the acorn. The acorn itself is long, somewhat conical, sloping from with a gentle curve from the base to the summit - which is somewhat truncate, they grow generally in pairs, and at the base of the cupule of a light yellow colour - tho they were falling freely - I suppose were not entirely mature. as the specimens I collected ~~were~~ have shrivelled very much.

The next is a Rubus which I found growing near a wet, swampy place in a low hammock on Beaver creek - it had both prostrate and upright stems - I know nothing of the flowers or fruit. I have seen specimens of R. hispidus almost as hispid as this, but then I thought it nothing more than an accidental variety. This

however is altogether different. If it be the *R. hispidus*, as I suppose,
it has wandered far from the place the books give it. The most hispid
is a part of an upright; the frizzly, part of a prostrate stem.

I am much in the habit of picking up every thing that seems out of place
or odd - and hope I may not annoy you by sending some of them occasion-
ally to yourself - I flatter myself that occasionally at least I may blunder on some
thing that may interest you which if ever happen may in some sort com-
pense you for your trouble.

About three or four days since by mail three articles from American
Journal Arts and Sciences - I am obliged for your kindness - as such
things always interest me. and I would otherwise never see them.
They are sent with the same note as was sent with the previous
ones. But need mine as yet by any means as such things are sold
ed through such an immense number of different works.

I have often thought that the Smithsonian Institution could not employ
a portion of its funds more advantageously or more in accordance with
the views of its founder, than to establish and publish a Journal of
Nat. His. that might give to the world all the original articles, connected
with the subject written in the country with monthly or bi-monthly
recurrences of what is doing in other parts of the world in this de-
partment of science - Thus hundreds might keep themselves well in-
formed - who under the existing state of things are compelled to
make do with ignorance.

Doct^r Asa Gray } With much respect, I remain Yours &c.
Cambridge Mass } Hugh M. Webster

near the perianth it enlarges to two or more inches in diameter

; lamina much compressed below, sides reflected
and arched over the opening of the tube - it and the throat internally
streaked with purple - it is neither the rubra, purpurea, nor flava

but I think the first species are correct; some of the leaves are
as in the rubra. There is the same marked difference between
the young and full grown leaves as in the rubra

I can't remember I mentioned this great difference to

any one but I thought you might like to see for yourself

I will get you some half dozen leaves for you and will get the flowers

I will probably spend a part of some day this week in search of
near Huckleberry as I am desirous of getting the flowers - as yet I

altogether different

or and is so rare

it is

with broader leaves and fruit light purple and some
smaller than a musket ball - the other with leaves more
narrow - fruit a third smaller

11. 1842nd Jan, 1842

... of the ... at ...
... of the ...
... near me - I will see if there
... this tree, particularly in late winter or early
... twigs are so brittle that they most seem to be,
... and a slight wind will shake them
... and if
... in soft mud or wet sand (favorite places) they
...
... has given it of propagating itself. Whenever we see a large
... by a young progeny in such a situation, they have generally originated in
...

The difficulty with me, in making my "white flower" a *Helonias* or *Amianthum*, was, that its racemes are in panicles; however I will send you one or two complete specimens, and then - you can tell me

Since I wrote last, I have found the *Sarracenia* so often spoken of, in another spot, five or six plants, and an old scap with a rotten seed vessel, the growth, I think, of last year. This year's flowers were probably by a late frost we had in April. The phyllostoma are now all decaying.

young leaves are springing up from the nodes, these I now think will by winter
be in a state of phyllocladia, which during the winter of the year will be
fruiting, next season will in their turn wither and be succeeded by others.
If I am correct in my conjecture the difference between the young and full
grown phyllocladia in this plant is very remarkable and will form an interesting
chapter in its history. I enclose another leaf to let you see the gradual change
that has taken place since the one I sent you in my last, was gathered. You see
that the thickened, concave margin of the leaf has changed its form somewhat
and that the minute point at its extremity has bent over assuming very exactly the
position of the future lamina! I also enclose a young phyllocladium of *T. nutra* in
which the lamina is well developed as also the tube a little more than half way
down - but the remainder is precisely in the condition of the whole concave margin
of the other leaf! That begins to look a little like a demonstration I think. I fear the
Sarracenica may become a bore, so we will drop it for a time at least -

I likewise enclose a specimen of *Polypremum procumbens*? to point out a
discrepancy between it and Elliott's description - the only one I have. He says "style
slender, as long as the corolla." This has scarcely a style - but an almost sessile cap-
itate stigma. He also says "Capsule ovate, compressed, 2-furrowed, nearly acute,
pointed by the persistent style." He has, I am sorry to say, been mistaken the plant
before, and but have no recollection of any discrepancies - it has altogether disappear-
ed from the place where I collected it, some two or three months since -
Since writing last I have collected the ripe fruit of the *Bomarea* I sent you - the
fruit is oval with a bloom, dark blue with a slight red cast, about seven tenths
of an inch long, from five and a half to six tenths thick, on pedicels 1/2 inch long.

Flesh deep red next the skin stone, to which it adheres but slightly, firm
and juicy. I enclose two ripe seeds - I preserve one of
the fruit for you, in alcohol. To morrow if nothing happens I am going out-
to see about this tree further than I have yet done -

With much respect I remain

Doct. Asa Gray }
Cambridge Mass. }

Yours &c.

Wm. L. B. S. S.

Butter Taylor Co. Geo, Aug. 18th 1858.

Dear Sir

Two days after despatching my last letter I accidentally blundered upon the "additions and corrections" appended to the second edition of your Flora - where I found the description of Polygnum - if I had seen it before, it would have saved me some trouble. Where B. describes from the living plant or good specimens, and I have clearly understood the view he takes of a plant. I have always found his description very accurate. I did conceive that is the difficulty in this case - for to my mind a portion of his description does not apply to this plant. It is, however, rather satisfactory. By the by, I placed it among the Gentianaceae, notwithstanding its two celled capsule - forgetting the free ovary of the Loganiaceae. No, had I recollected that, I doubt whether I could have reconciled myself to have placed it next to Spigelia, having no knowledge of the many plants that stand between and connect them together in a general Flora - one among the many difficulties, we whose knowledge of plants is confined to those that grow around us, or are recorded in our comparatively local Floras, have to contend with. At the same place I found a note on Gelsemium - which has been a bother to me for many a day - I do not know that I yet altogether understand the thing - its position is not at all clear in the description.

on the system being, in some respects very similar. A tincture of the roots, is becoming to be used extensively by our Physicians as a sedative, in controlling the circulation in febrile diseases. as being more effectual and much more safe than Veratrum - always indicating, by its singular and decided effects upon the vision - the approach of danger - For many years it has been used and kept as a secret by a few persons - as a certain and effectual remedy in syphilitic diseases of long standing. I send you a specimen of Phaseolus perennis? differing altogether in leaf and habit from the common plant. It is rather common thro' the woods - but in open fields it grows much larger - growing around for fifteen or twenty feet - always pro-cumbent, even when running among the bushes - the leaves never, so far as I can see, vary from the specimen. In clearing off the wild growth, from my garden this spring. I left one growing - passing it twenty times a day I had never dreamed that it was any thing else than one of our prostrate Desmodiums - until, I chanced to remark the peculiar position and want of symmetry in the lower leaflets, which lead to an examination and the difference revealed itself.

I am at a little stand about the Drosera. - the petioles in the specimen are short, in all found until recently were three as long; this, together with the more irregular ribbed stipes agree with D. longifolia - whilst the minute ribbed seed - belong to longifolia. The irregular ribbed stipes are minute. The ribbed stipes are minute as scales on the upper part of the petiole, near to base. I have observed in the leaves of the

longifolia is as minute as of a very small flower. - Our Narcissus is now in flower on the sand hills - how delicate and beautiful! I will send you the seed - not many specimens. - I have followed the Narcissus up, to its native haunts - the rock hammocks, where the soil is somewhat sandy and dry - & growing in that sort of mossy trees to other, but in a ten to fifteen feet high. I find a few cool-ice - as through the pine woods. The fruit - varies from the form described in my last, to globular. No change in Sarracenia since my last. In the S. rubra I find tube and lamina fully formed in the bud! still I sometimes find a leaf several inches long, without either. In the undetermined species - in the bud, as yet, leaves - but no phyllodia! I now, know not what to make of it.

Doct^r Asa Gray. } With much respect - I remain
Cambridge Mass. } Yours &c,
Hugh L. Fisher.

Myer Co. Geo.

Nov. 1839.

Dear Sir

I enclose the seed ~~flowers~~ and leaves of a Pennisetum that I obtained from Columbus the past season. Is it the same that I sent you, as growing thro this region? By the by, I do not recollect that you gave me the name of the latter. I am still in quest of the tree that I have considered to be Elliott's P. umbellata. It was growing on the place where I lived near Columbus, but on requesting a friend to go there and get specimens, he found that the individual to whom I had sold the place, had cut them all down - He had therefore to search the woods and collect his specimens by chance - he obtained two - but I am not satisfied that either is the thing I have in view. I will send the other which approaches it the more nearly, after a while.

I also enclose a joint or two of the autumnal form of a Panicum that grows very commonly in our swamps in places not much shaded by bushes. it grows to the height of three or four feet, with a stout, woody stem, and a moderately large panicle flowers scattered, solitary. Whenever the seed of the primary panicle ripen, the culm dies down to the upper node - the lateral branches then put forth each bearing a small, concealed panicle of three or four flowers, as you will find in the specimens.

In this region (Georgia & Ala) all the Panicums that bear solitary, scattered flowers in panicles, that bloom early in the season, in their mode of growth agree exactly with your description of P. dichotomum in your Manual - only, that the first branches after flowering, branch again, and these too again, almost to no end. In low, rich spots on the borders of fields, in fall and winter I often find confused masses of dry grass, two feet or more high and as much in diameter, the whole distinctly traceable to one root. ~~the whole~~ ^{the whole} originating from the ^{almost} interminable subdivision of the culm, from the manner in which the P. dichotomum is described by yourself as well as (Doct. Torrey and others, one would be led to suppose that this mode of growth is confined to this species in the northern and middle states. This species that I enclose is ^{branchlet} ~~subdivided~~ less than any other that I know.

The Sarracenia flava does not grow with us so far as I get know. I have been familiar with it in the low country of the Carolinas - years ago - and my recollection of it differs from the plant I have talked so much about. but your knowledge of our familiarity with the matter enables you to tell me with little difficulty. Still it seems to me strange that the angular outline of a transverse section of the phylloclad so different from anything seen in the piriparea the rubra or variolaris, which I have frequent opportunities of seeing in their season, should be entirely overlooked in all the descriptions I have met with.

If you wish it I can send you roots of this plant any day - as well as those of any other of our plants and shrubs - that you would like to add to your collection of living plants - it is much easier

to me than to gather seed which is a much more difficult matter than I anticipated.

With much Respect

Doct. Asa Gray
Cambridge Mass. }

I remain Yours &c.

Asa Gray
H. M. S. }
H. M. S. }
H. M. S. }

P. S. Among the plants I sent you a while since were specimens of, possibly a Shreve - as it is occidentalis?

H. M. S.

I neglected to observe in its proper place that the fruit of the Prunus is oblong, black, with a bloom giving them a bluish appearance. The average size about six tenths of an inch long and between four and five tenths in their transverse diameter.

Heister

Taylor Co, Geo. 24th July 1860

Dear Sir

I enclose a specimen of the Whortleberry, with hirsute fruit which I mentioned to you a year or so since; I found it in 1857, but lost sight of it till this summer. I would not trouble you with it now, were it not that last summer, thro carelessness, I sent something else I forget what, in its stead, I discovered the mistake a few days after and my mortification was such that I determined, not to give up the hunt - until I had rediscovered it - and convinced you that I was not as careless an observer, as you might be led to think from a mistake so ridiculous. It grows in deep boggy swamps and the fruit ripens later than in any other of the family - I know nothing of the flower - You will see that one of the berries is ripe.

I have added a plant that has troubled me a good deal. I have tried ⁱⁿ various places but cannot get it to fit any of them to my satisfaction, my impression is, that it may be a Negundo. The flower is so minute and my appliances for examining such things being not the most convenient, it may be, that I have not formed a correct idea of it. I am, I think, pretty sure of the stamens and petals seem to me to be inserted at the base of the ovary - and I can discover no

trace of the calyx. When the flower first opens, four very minute stigmatic points are distinguishable on the summit of the germ - and at the time of impregnation the latter is crowned with apparently as many small purple stigmas, which after the stamens fall away, continue to increase until, when the germ is fully grown, they form a large, comparatively speaking, confused mass of long, slender, tubular, purple fibres, with transverse partitions at short and regular intervals, as if they were jointed. Their appearance at the different stages is such that I suppose a person might be induced to think, on examining a few specimens, that the lower flowers were pistillate, the middle hermaphrodite and the upper staminate, while in fact they are all perfect! The structure of the stem is curious and pretty - it is hollow with a central pith, from which about five thin membranous plates radiate to the periphery - there are also transverse partitions at every whorl of leaves. It is the first of this tribe of aquatic plants I have ever seen - hence I have been curious about it.

Our Potamogeton Virginiana is now just beginning to ripen its fruit, whilst that of the P. perotina has been gone for more than two months, whilst I suppose just the reverse is the case with you, this entire inversion of things by a few degrees difference of latitude is so strange and unaccountable, that I have at times been almost led to think that

if you had the northern and southern trees growing, flowering and fruiting side by side, ~~that~~ you might detect differences sufficient to separate them - and make ours, as Elliott does, a distinct species.

With much respect I remain

Professor Gray }
Cambridge Mass }

Yours &c.
Hugh H. Webster

Walter, Taylor Co. Geo. April 24th 1877

Dear Sir;

Your favour of the 28th ult., was received on the 2nd inst. an accident happening near that time, rendering it painful for me to write, has delayed this reply until the present time.

I have a distinct recollection of the finding of the Iris which you mention; it was met with, some twenty five years ago, perhaps more; eight or ten miles north of Columbus Geo. in what is now called Lee Co. Alabama, on Black dirt creek, near its confluence with the Chattahoochee river. It was in flower from about the middle of May, to the last of June. After comparing it with all the descriptions of species found in Elliott's Botany and finding none to fit it, so far as I could see, it was sent to Doctor Torrey. He replied that it was found, neither in your Herbarium nor his and that he thought it new, at the same time requesting me to cultivate it. This I undertook, planting several in my garden, at the same time giving some to a close neighbour; mine flowered but two years and died, my neighbour's lingered somewhat longer, but ultimately failed; a result that might have been anticipated, since the plants had grown in a marsh and ^{were} transplanted to a high, dry and thirsty ridge.

In May 1856, having concluded to remove to Taylor Co. at the close of the year, I went up to Black dirt creek and specimens were procured to send to

yourself and which accordingly were sent in, probably, '59. A few years after, a friend in Columbus, at my request visited the locality where they were first discovered, but found them all destroyed and the spot where they grew, planted in rice. However, when I was familiar with the country around, the not common, it was by no means confined to one particular spot, and I have hopes that it may be yet growing in the neighbourhood; at least I shall make an effort this season, to recover it.

The *I. versicolor* is growing plentifully on a small stream, not far from my dwelling. The *I. verna*, now in flower on the slopes and dry flats near the small pine woods streams, is very abundant. Last season for the first time I found one specimen of *I. cristata*, I may find others the present season. These are all the species that I have yet found in Taylor Co.

It will afford me great pleasure to send you these or any thing else in my reach, that you may wish.

With much respect I remain

Professor Gray }
Cambridge, Mass }

Yours &c.

Hugh M. Keiser
3

Bretter, Taylor Co. Geo, 18th Janr 1879.

Dear Sir;

With this, I send you a couple of small boxes; the first, containing two capsules of the Iris, which I first sent to Doct^r Gray, twenty five or thirty years ago, and of which, at your request, I obtained and forwarded specimens in August, 1878, for analysis. They are, I am sorry to say, somewhat imperfect; about the time of their ripening, in consequence of several tremendous storms of rain, they were overwhelmed and for sometime remained buried in the sand. I hope however they may enable you to form a correct idea of them; such as they are, not unimpaired.

As to that which seems to be a drupe, possibly the fruit of a Nyssa? I have never seen the flowers and from its height, I have been unable to make out distinctly, the leaves of the tree, at the foot of which it was found, in a shallow pool, left by the receding of the waters of the river, during a protracted drought. The remaining contents of the box, are endocarps of the drupes of the *Prunus Caroliniana*. Although there is but a bare possi-

bility that they may not have attracted your attention long ago; having as yet, found no mention made of their peculiarities in any place, I have concluded to send them. They, in their appearance, are very different from the seed of the Plum and Cherry, and most certainly are, neither ~~very~~ ^{very} nor ~~strong~~ ^{strong}. In order that you may examine them in a fresh condition, I have just gone into my yard and gathered a few cupules and placed them in the other contents of box No. 2. This contains besides, two acorns, very different from any thing of the kind I have ever seen before; they were picked up on the banks of Flint river, ten or twelve miles from ^{this} at a place I had never visited before. The height of the tree is less, in proportion to the diameter of the stem, than is common in our larger oaks; the branches are somewhat thickly crowded and inclined to be horizontal; their extreme branchlets, thickly covered with leaves; the latter are perennial and so far as I had an opportunity of examining them, are entire, lanceolate, with very short petioles; those on the tree being inaccessible, I was obliged to content myself with five or six which I found on the ground and even of these, on getting them home a few days afterwards I had ^{only} what may be called the fragments of two, which I send with this

There have been, since the beginning of autumn, several frosts by which the banks of the river were overflowed; consequently the

acorns since falling, must have lain much of the time under water and thereby somewhat injured and discoloured.

I have speculated much on the cause of the strange forms of the prominences with ^{which} the cupules are mostly covered and clearly representing its scales. Is it possible, that when the fruit was young, insects may have had a hand in the metamorphosis? On the upper part of the cupules there are commonly smaller prominences, which though peculiar, still bear some resemblance to ordinary scales. I regret that the pieces of leaves of which I spoke above, have, in some way, been mislaid; however it is probable that by leaving a postal card at the office, for a member of my family who lives very near where these trees grow, I may within eight or ten days get parcels of perfect ones, which I can send if you wish.

Doct^r. Asa Gray, } With much respect I remain,
Cambridge, } Yours &c.
Mass. } Hugh M. Kissler.

"incubated in the middle" and "in the shape of," "in the
pedicels! When the specimen I send you was gathered
the pedicels with their flowers, had all been shed, and the
branches of the peduncles still remain, and likely to do
so until they decay.

No. 10. These were gathered, but a few days since, on the damp,
barren flats on "Big white water" creek, twelve or fifteen
miles from home. I had no means of examining ^{it} on the spot;
or of getting them home, except by stuffing them in my pockets,
and in a miserable condition, were they, when I got them there.
I selected the least injured to send you. I examined it as well
as my poor ability and the wretched specimens would admit -
and concluded, if it was not a *Salix*, it was useless for me to study
it further. Besides other things, the minuteness of portions of the
flower, prevented my making any effort to determine the species.
If it is a *Salix*, its appearance is altogether different from
any other I ever saw, in Taylor as yet I have seen but one
species, as long as I have lived here. I did think to mention
above that the shrub just spoken of was not abundant. I
think, the tallest I saw, was not more than 18 inches -
in the fall.

Doct^r Asa Gray
Cambridge
Mass.

Yvermain Vc
Hugh M. Kissler

Miss

Butter, Taylor Co. Geo. 15th April 1880.

Dear Sir;

For mine, I send you a few plants, you will oblige me
by looking over them.
No. 1 was gathered, the 1st part of Feb. '77, from a mossy cliff, in
the Flint river hills.
No. 2. On visiting the place again, about the middle of April '78, the cliff
was entirely bare, but wherever on the hill around, there was a spot suf-
ficiently level to contain a few decaying flowers, this was found growing.
I suppose them both to be *Corydalis*, but probably, different species.
No. 3. *Hamamelis punctata*, grows at the base of a cliff at the foot
of the hill above mentioned and but a few feet above the water of the
river, when it is in its early stage. I was much surprised on finding
it there, Flint river not being connected with any mountain stream.
This is however, somewhat peculiar, the flowers being perfectly white,
excepting a pale yellow, inular spot just between the
throat of the corolla and the base of the petals; the same distance about equal to the
breadth of the latter, at its base. On withering, they become a
copper colour, as I suppose it may be called, when dry, they are as you see.
No. 4, *Baptisia* - ? I have been unable to satisfy myself of the
species, when growing, the flowers were bright yellow and the corollas

capsules much inflated.

No. 1. This, a few days ago among my dried plants without a label. I recall nothing about it.

No. 6. I think the most delicate and beautiful fern that I have yet found within my prescribed limits, it was found last August after the spores had been shed, — ?

No. 7. This, in its general appearance, somewhat resembles *Baptisia alba*, but the leaves, flowers and the plant itself, though growing in a fertile pine land is much smaller ^{than} that, even when growing on the poorest and steepest pine ridges. A portion of the specimen, however, was laid

No. 8. *Gentiana* — ? Sometime since, I sent you a plant, which, I am sorry to find, you had not received, was the *G. saponaria*. I certainly must have misunderstood that species or inadvertently sent a plant that I did not intend. I am sure this is the right one. When I first gathered it, there were at first, three flowers, one was taken off for examination, which showed that it had been gathered too early, the stigmas not yet having separated. I therefore send you a fully grown capsule gathered in '78, which though dry and shrunken, still faintly shows what it had plainly been. It is a continuous, yellow, granular ring surrounding its base, with the depressions, in which, the bases of the filaments had been lodged. This is what is meant by "blands between the bases of

the filaments." I send with it a flower, of what I have regarded as the *G. saponaria*: you can tell me, whether or not, I have been right.

No. 9. *Gentiana* — ? I have known this plant for more than thirty years. I first found it growing on the sandy point of an island in the Chatahoochee a few miles above Columbus, next in Taylor Co. on Flint river, near the "Old Agency" close on the edge of the water, and again, five or six miles above the last, on a small brook among the river hills. Here it grows much higher than at either of the other localities. I judge its average in this place, may be between 18 in. and two feet. At this place I obtained the specimen I send, the first and only one that I have ever found bearing fruit, which is the principal cause of my sending it. It is strange, and considering the time and opportunities I have had of becoming familiar with it, so strange that I am often at a loss to believe that the appearance of fruit in this case is abnormal, the result, probably, of an accidental anchylosis of the articulation by which the pedicel is connected with its branch of the peduncle; but granting this to be correct, there is yet, a great mystery, behind, which I am unable to penetrate. The very slender peduncles about equal to the petioles, are solitary, axillary and invariably divided into two branches, so far as I have ever seen, to which the pedicels are articulated. I think this view of the matter correct, rather than that proposed in the "Flora of North America, by the authors; "pedicels — an-

Los Angeles. Cal.

Nov. 12th 80

To Prof. Lorenzo Watson
Cambridge Mass.

My Dear sir

I have today put up
six pkgs of plants for Dr Gray or yourself -
as I presume "it is all in the family" if
either of you receive them. I have
endeavored to send fair specimens when
it was possible. But some have been
brought to me in a scabby condition &
I cannot always send what I would
like. Hope, however, to have sent what
you will be able to use for identification.

I have to regret not being able to give
my whole time to botanical pursuits. In
the list sent you will find a few of my diffi-
culties noted.

I enclose stamps for return of list when
you will have found leisure to name the
plants.

I see Dr Gray has gone to Reno
& I look anxiously for the completion of his great
work.

Is the 2^d vol of Cal. Bot. out yet?
I wish to get a copy at the earliest date
possible.

Believing in the great friendship
of Dr Gray & yourself for post favors
remain, Dear sir

Yours y^t J. C. Merwin

10/1/10

Los Angeles. Cal.

Aug. 29th '87

My Dear Dr Watson

On thousand thanks
for the corrected list of
plants just received. I
will now carefully overhaul
the whole list & get it
put aside. (It on early
day I hope. to send you
another batch - mainly
from the Sonoranish - Wt
which I have lately recd.

In the mean time I
enclose two specimens
with this note - both
collected in dissipated ponds
on Mesa Land near
Alhambra in California

Los Angeles Cal.

Dec 10th 1897

My Dear Mr. Brewster
1 Day before yesterday
Dr. Parry of the Journal
called on me and
brought me 6 sps. of

Some quite with
a specimen of genuine
the int. type to me
which perfectly agrees
with the description.

We are satisfied that
they were species which
I sent you a few days
ago. The sps. of *U. allata*
are possibly allied to
both new ones described!

The whole description
is certainly difficult

and you will
be satisfied.

Very truly
yours,
J. H. [unclear]

Los Angeles, Cal.
Sept. 19th, 57

My Dear Dr. Watson,

Thanks for your note about my *Filia*, received a few days ago. Before its receipt I had already written you a short note. I now come to trouble you again - & I do so because I cannot help myself any other way. I think when you receive the packet of the following list which I have written with you will agree with me that in my search for light, I have been very busy getting out the name.

I enclose postage for the return of the pkg of plants. I hope you will not think it too much trouble & will be able to find time to sit my list right.

a - a specimen of *Filia umbellata* (?) in good flower. This you can keep. I would like all the following material.

I do not think it agrees with *F. leucophylla* at least, until I get a good specimen of *leucophylla*. I feel that my plant is a good species.

1
From the Academy of Sciences, San Francisco, from Dr. Parry, and labeled *F. integrata*. It seems allied to my plant, but I am not quite sure they ought to go together.

2
Sent me by Lemmon as *F. integrata*. Seems more nearly allied to *umbellata*. Dr. Parry, Lemmon and myself thought these three might possibly go together & were wonderfully undersailed.

3
This is the one I sent you. Was from Lemmon & labeled *F. integrata*. I don't think it is same as No 2.

4
This also from Lemmon as *F. integrata*.

5
From Lemmon & was determined by him.

- 6 From Lemmon [?] as *G. viscidula*?
- 7 From Lemmon [?] undetermined.
- 8 From Lemmon [?] marked genuine *G. Squarrosa*!
 Green says it is genuine *leucophylla*.
 I myself think it is *G. cotutrefolia* - at least
 it appears to agree with the description of that better
 than any other.
- 9 [?]
 From Lemmon marked *G. cotutrefolia*!
 But it seems to me that there are
 two species mixed - are the two specimens
 not different?
- 10 [?]
 Of my own collection in Los Angeles River bed.
 I think it a *Folia* - but can't place it. It is
 the only specimen I have found.

- 11 *Phacelia Davidsonii*? -
 from Dr Parry - near San Bernardino
- 12 *Phacelia Douglasii*? -
 from Dr Parry - near San Bernardino.

Bill - my list is good - better than

- | | |
|---------------------------------|--------------------------------|
| 7. 9. = <i>G. squarrosa</i> | 11. <i>Phacelia Davidsonii</i> |
| 8. 9. = <i>G. cotutrefolia</i> | 12. " <i>Douglasii</i> |
| 3. 4. 5. = <i>G. intertexta</i> | 4. <i>G. divaricata</i> |
| 2 = <i>G. minima</i> | 6. <i>G. viscidula</i> - form |
| 1 = <i>G. leucophylla</i> | 10. <i>G. inconspicua</i> |

Los Angeles, Cal

Oct 5th 31

My Dear Dr Watson

A thousand thanks
for your kind letter
in return of pkg of
plant. I have not
yet opened it. It
came just as I was
preparing to send you
this note & a plant
which accompanied it.

I shall be in a
barn so it may
be a little rough. I hope the
character of the leaves
changes slightly.

I collected it at
above place. (I hope it is
not a duplicate of the
one you have.)

me, around, and in
caves of the
side of the Canyon
near the "Hot Springs".

If it be Cyathus
Cyathus Edulis I
am at a loss what
to say. If it be
C. Edulis, I don't see
why one of its most
striking characteristics
should not be noted,
viz, its excessive viscosity.

As soon as you decide
what to do with my
Filia umbellata, please
let me know.

What have done with
Green's new Collomia
heterodoxa?

Yours etc

Los Angeles, Cal.
Feb. 3^d 82

My Dear - Dr. Watson

I wish to return my most sincere thanks to Dr. Parry & yourself for your kindness in looking over my plants. I wish to add a few observations as well, if you can have the patience & time to hear me.

- 472 - in regard to this (*Salix lasiocandra*) - the glandular toothed leaves and more or less glandular petioles & stipules together with shape of scales, made me put it down so. I could not see that it was the same as 471 - with dark bark while 472 had light yellow bark. But you may be right.
- 527 - was so very viscid & sticky that I did not doubt it was *Ribes sanguineum* v. *glutinosum* - but you may be right again.
- 593 - you must have lost it - it very likely stuck to the paper above it - & then you divided *G. Virgata* : it was a very delicate & small plant.
- 655 - glad you came to time on this plant - it is very glaucous in appearance. I felt satisfied it was not to be found in the Botany - but don't think it one portable like *G. virgata* - certainly nearer *G. viminalis*.
- 657 - we have been taking for *O. bistorta* v. *ventricosa*!
- 659 - will have to get new specimens - can't possibly detect any tuberculation about the seeds which *S. Torreyana* requires.

I send you a pkg of plants with this, containing the following.

- 662 - This I take to be *Molvastrum densiflorum* Wats. used in the return you made. I had sent it & some of
- 663 - together. This latter I take to be what you call *M. murraanum*. But I cannot possibly see anything but *M. Thurbieri*. Carpels have no reticulation on sides & the whole appearance is very unlike 664 (*Spartoclea Emoryi*) which is said to differ only from *M. murraanum* in its 2-seeded carpels. Still you may be right.
- 672 - ripe fruit of *Abies oblongifolia*? This may settle the matter. But it seems to me that there is no light brown or any brown color about the tree. It is rather a dark blackish grey.

(from San Juan Capistrano)

a' This I take to be genuine *P. romasissima* - very viscid. Dr. Parry thinks it is not - but it fills the bill as laid down in the Botany, so think I. Now the one I sent you before as A I took as *P. torreyana*. with which it agrees in all respects except the inflorescence, and does not agree with *P. romasissima* in a single particular! It is (from Gabriel farm) very abundant, very constant.

not a var. of something it is new. It has bothered me ever since I commenced collecting. If it is *P. Torreyi* John - the description should be modified.

B' *Eritrichium fulvum* - although I believe you have returned this same to me as *E. Canadense*. See next.

C' *Eritrichium Canadense* - This I take to be genuine *Canadense*. It fills the bill in most particulars excepting size. It is a prostrate or barely ascending plant - grows abundantly here, more so than B' ^{smaller} sepal agree, & not closed over calyx agree.

as to B' - This varies from 1 to 2 feet high - erect, mostly simple but often branched as specimen. sepals narrower than C' & closed tightly over fruit.

calyx as decidedly circumsciss in C' as in B'

in B' the areolas run from keel to edge?

in C' the areolas are almost in two rows - i.e. two between keel & edge.

in B' the leaves are always lanceolate as to tips

in C' " " " acute " " "

in B' " " " thinner & of looser - a tw

in C' " " " thicker " " closer "

- in fact the plants as found growing are at once easily distinguished by the leaves!

Now you will find the above notes at variances with the "Botany" & "Flora". Have I identified the plants?

D' If this is not *E. angustifolium*, I cannot find it here. I expect you will call it barbigerum. but

E' I sent you two years ago as *E. barbigerum* & I think it is right. The seeds are quite rounded & mottled. frequently solitary & rarely if ever all 4 ripening.

In D' (and all specimens thereof heretofore sent) the rule is for 4 seed to ripen & rarely only 1 or 2. Seeds are also more or less sharply angled, & scar is moderately wide & green, while in D' it is reduced to a mere line, both up & down & across at base.

I hope I may get some genuine *E. angustifolium* from up the coast & may then see my way out of fog.

F' *Eritrichium muciculatum* v. *ambiguum*.

G' two papers with seeds of *Cratogeomys*.

No 1 is mottled, oblong, almost cylindrical, Los Angeles ^{Santa Margarita valley}

No 2 is dull leaden grey, broadly obovate, distinctly flattened, much shorter & broader in proportion than No 1.

In both the Caruncle is prominent after ripening - and

oppressed when in a more or less imperfect stationary mature state. So these characters show the one to be *tenuis* & the other Californicus? if so, more stress should be put on them as the character of the leaf is utterly unreliable - at least in specimens which I have sent. I also doubt reliability of caruncle as a character.

I have now shown my opinion & had
better stop. I feel a delicacy in persistently stating
my opinions - but I guess Cambridge & Science owe
a plant or two to my doggedness - already. Why
not another one or two? - If I get the opportunity
during the coming season I may be able to push
some of these a little more.

With kind regards, believe me, Dear Sir
Yours truly
J. C. Merwin

Los Angeles, Cal.
Feb. 28, 1882

My Dear Dr Gray

Your letter & Card
both received. Thanks - it
is a great relief to get
these *Erechtia* straightened
out. I do not understand
from what you say, who
(or which species involves *exuata*)
is authority for *E. Nothofolium*
- I presume it is Gray &
have so put it down.

Now as to *E. intermedium*
Gr. It will have to be a
little cosmopolitan to take in
all. I had separated
the lot into two botanies.
One of which was my *d' = E.*
angustifolium (But evidently not
~~that~~) & the other what I

was disposed to admit as
E. borbigerrum. The difference
is mainly in habit. d'
being little branched from
base with spikes elongating
in fruit becoming distant in
age) & also less one sided -
Color greenish. ~~The other~~
Spikes also sometimes more
than two together, something
like *argusifolia* or *muricolata*.
(much branched from base)
In the other, the spikes are
often solitary, long pedicels
but remaining dense in fruit.

The hairs or prickles
of *E. borbigerrum* are very marked,
but the second form above mentioned
varies towards it, having more
or less of fine white hairs mixed in.
- the first form few or none.

But the fruit in both forms
is more nearly lanceolate, or narrowly

ovate acuminate & scarcely if at all angled. - the
sides being decidedly rounded. The taste is
more separate (separates towards the tip) & less distinctly
than in *E. borbigerrum*.

I will try and give attention to the matter
the summer, as I may have opportunity.

The Cotton seed from Bay Station was
reduced out of all recognition when it got here,
- however I shot to look for other him again
and the Cotton

you dodged my a - well, I suspect it is
M. intermedia - I am not through with it
yet. Cannot say whether the *M. muricolata*
is present or not, but try & observe.

Yours much obliged

J. C. Merriam

Los Angeles, Cal
March 8th 82

My Dear Dr Gray

I don't know but it
may be too late to call your
attention to *E. Nothofalvum* Gr. &
perhaps unnecessary as well.

I wish to refer to the fact that
very often only 1, or 2 seeds ripen.
In case of two - they bend over &
loop past each other. You may
have noticed this - besides I
called your attention to it two
years ago.

As to *E. intermedium* Eng. I
wish you look at 345 of my
San Jacinto plants. Some of
my specimens show very striking
elongated spikes - bracting from
the very base or root just

like *E. Canescens* does.
I will try & observe carefully this
summer & see if there be
any necessity for the division
into two lots, which now seems
to me so very likely.

The Sen Jacinto plant had a
peculiar leaf-growth of which, I
think, I sent specimens.

I have just received
a letter from Rev E. L. Greene
in which he apologizes for
overlooking a *Hernizonia*
which he called from my
Sen Jacinto Collection (No
656). He & Parry the next
day collected on their way
to S. F. The plant he has
published as *H. Hummonii* Griseb.
with which he says my plant
proves identical.

Now I have tried to make

my specimen (a mere one) give with his descrip-
tion. The cordate leaves are very
decidedly minutely cut or parted - I find no glands
of any distinctive kind or in any distinctive position -
I find very few white flowers. - Seeds of populus more
or less greenish or brown. - I sent it to you as *H. rugulata* J. & G.
& find my ticket also has *H. borealis* J. & G. on it.
I am left my leaf fern back unchanged. This
makes me doubt the Greene's identification. I made
like to feel certain about the matter.

With kind regards

Yours Yth

J. C. Moore

Nov 711. = *Baeria uliginosa*
from interior proppes

" 721 = *B. gracilis* v. *paleacea*
(*B. tenuis* var. *pub. (C. J. 1)*)

" 720. *Adiantum affinis* (Los Angeles Cal)
a red species. (C. J. 15. 82)

My Dear Dr Erag

Thanks for the Postal
just to hand giving correction
for the *Trichostema*.

I must apologize for not
having acknowledged receipt
of the latest "Contributions" both
of yourself & Dr Watson. They
came just as I was getting
over a protracted turn with fever
and a consequent forced va-
cation at the Hot Springs.
In this way it had escaped -
my memory - thinking I
had already sent the acknowledg-
ment.

About the middle of August
I sent you roots of the

Cotyledon visida Wats. n. sp.
- on the 9th & 11th of this
month I forwarded you
two pkgs of plants which
I hope you have also,
ere this, received.

As soon as any other
parts of the Flora are published
I should be glad to know it.

With kind regards - etc.
Yours affly
J. Presn.

Thanks for the *Heterotheca* &
Andropogon returned.

I will enclose in this a specimen
of *H. flexibunda*, which you
named *groudflorea* for me
long ago & which Parish has
always called *groudflorea*. I
am glad that the one I sent
you is *H. flexibunda*, as I suspected
it to be a shaded growth.

I shall now look for a
plant with only about one
head on it - is that right?

Dr Parry has returned to the
Coast again - hope to see
him before long.

I will also put in a scrap
of what I ^{call} *Frouseria Hookeriana*, which
you named *F. tenuifolia* for me
long ago. It grows abundantly
here, & very large ^{2-4 ft} & much widely
branched. Leaves might almost be
called palmately 3-parted with the middle lobe
very long & all of them variously cut.

Yours very truly,
J. M. Meier

Los Angeles, Cal
Oct 7th 82

My Dear Dr Gray

Thanks for the Report
on my plants so far as you
have had time to examine them.
There are still a few doubtful
points which I would like settled.

In regard to 676 it is so
unlike the typical specimen I have
from Dr Parry that I could not
identify them as the same. If you
are correct the description of
P. Parryi in the Bot. must be
amended. 676 is not cut
down over $\frac{1}{3}$ nor does it have
a rayed eye of any kind - both
which points are against *Parryi*.
Besides it is a very diffusely ^{much} branched
& more plant - as much _{so} as *Whiffonia*.

680 *Scutellaria Holandensis* - I marked doubtful, but as you say nothing about it, I understand that it is correct.

681 - after sending away the plants I began to think the small specimen was *J. angulosus*. I thought I saw it published in some pamphlet you sent me - but I can't find it any where. Some one has carried it off or it has got bundled up somewhere in my collection - or I have dreamed of seeing it. If it is published, would you be kind enough to send me another copy of the pamphlet?

686? Is this right. *And. polymeri* - and if so is not this the plant I have sent several times already as *A. Stachyoides* etc.?

698 I could not get this under *Sedums*, which calls for petals distinct! - in this they are decidedly united at the base. I saw no purple mark of any kind & the very long acuminate leaves upset me. It is certainly unlike the description in *Bot. of S. variegatum*, of which I have only one perfect spec. seems to me to be this exact form described in *Bot. scutellaria areolaris*.

710 *Cerastium* - I blundered inexcusably on this.

712 I find no reniform leaves whatever in any specimens. *Ranunculus hibernicus*.

713. *Cheranthus asper* - I think I am surely right - the forked hairs (~~or~~ like this) & broad sepals seem to end all doubt. ~~Just only will determine.~~

717 I blundered unnecessarily on this

718. *Coryx* - I thought it possibly *laciniosa*

724 *Enoph. romasissimum* - I cannot find any variety mentioned. Is the variety (I can't read it) you give a new name?

727^a Am I the first to send you this plant? - I think it is annual. Will try and watch it.

6 *Chara*, what? fragilis? I have nothing to look it up in.

It - ^{solid^{os}} - this is the same plant (stout form) I have before sent as *elongata* & yet I hardly believe it.

X The *Chorizanthe* - beats me. I guess it is a near relation of *Eriog. gracile*. My 201 (not 601) is *Ch. stictoides*.

I see *Stachis* is put down flowers glabrous - *Xanthi* flowers pubescent. Will I find that *stictoides* has more or less villosity on the flowers - as much so as anything I have that I call *Xanthi*. Guess I'll have to send you the whole crowd for a ground round & branding.

It is with unfeigned regret
that I hear of your accident.
Pure humanity ought not to
expect less — and then
you know we can hardly
help being so selfish as to
be jealous of anything that
may arrest you in your
(for us) work! ¹²

I hope for your own
sake that you may soon
be quite restored. After all
what a wonder it is that a
kind Providence can keep us
going in the midst of so
much weakness & danger.

With very kind regards
believe me, Mr. Dr. Dr.

Yours of
J. M. Mason

Los Angeles, Cal.
Nov. 22^d, 82

My Dear Dr. Gray

Your letter of explanation
about the little *Gilia* has
just come in — & yesterday
your paper on the "*Flora*"
was received, for which
thanks.

Friend Leavenworth has
been writing impudently.
I said to him that Dr.
Gray had got away with
my little *Gilia* — a specimen
of which I gave him last
year & named by myself
G. umbellata. I had
sent it to Dr. Watson, &
when he found leisure to
report on my plants.

he would not admit the
Folia as new & said it
was only a form of leucophol.
I, of course, deferred to his
judgment, & next year
sent it again to you
telling you I had sent it
to Dr W. as new, but he
would only call it leucoceph.
& I wanted to know if it
was typical or only a variety.

In the mean time you
named & published it as
prostrata.

So I said to Lemmon 'Dr
Wooten - Killed my plant
out at the back door when
Dr Gray was away - & Dr
L on his return found
it among the debris, pronounced
it good - & named it. So
you see they rather got ahead of me.

Now I never meant any thing disrespectful
but as in the way of compensation - so I think
you will see from the language used.
I have not the slightest feeling in the matter - indeed
I am glad you published it. Another point of my
own all covering I had thought of calling Erigeron
Creationum - but Dr Barry suggested compensationum - and
I thought his name better & told him so -
for a head & far back. I have great respect
for Dr Gray - so possibly ironically so; and I
hope you will not for one moment think
that I feel aggrieved or would infer from this
matter in any other way than peculiarly, as above.
That either yourself or Dr Wooten had a single thing of
other than the most honorable in the matter, I do not
think. In fact, if I was going to compensationum, I should go
for "Dr Wooten".

Handwritten text, likely bleed-through from the reverse side of the page. The text is illegible due to fading and blurring.

May 1875
No. 1000

My dear friend
I have just received your
kind letter of the 10th inst. and
am glad to hear from you.
I am well and hope these few
lines will find you the same.
I have been thinking much
of late of the many things
that are going on in the world
and how they affect us all.
I feel that we are living in
a very interesting time and
that we should all be doing
our best to make the most
of it. I am sure that you
will agree with me in this.
I am, dear friend, very
truly yours,
Wm. Lloyd Garrison

To Mr. George Thompson
100 North 4th St.
Philadelphia, Pa.
My dear friend,
I have just received your
kind letter of the 10th inst.
and am glad to hear from you.
I am well and hope these few
lines will find you the same.
I have been thinking much
of late of the many things
that are going on in the world
and how they affect us all.
I feel that we are living in
a very interesting time and
that we should all be doing
our best to make the most
of it. I am sure that you
will agree with me in this.
I am, dear friend, very
truly yours,
Wm. Lloyd Garrison

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314 S. Hill St
Los Angeles Cal
May 28, 1885

My Dear Dr Gray

Could not find time
to send these plants sooner.

We were astonished to
find so many of Main land
plants. *Lycium Californicum*
abounded - so abundantly
pusillus, *Muscibaccharum*
Oxy-stellatum. At one time
Cotyledon lanceolata (?) densely
covered the upper end of Island
- rhizoms every where dead, only
2 or three small living spec. now
has been exterminated by the sheep.
Lovatus is also almost gone
by same cause.

Layia polyglossa, *Hieracium nudum*

every where — *Medicago denticulata*
dancus parviflorus, *Cereus Emoryi*.
Opuntia prolifera, & *occidentalis*
~~*Rhus frugifera*~~. *Rhus ovata* and
integrifolia, were the only large
shrubs seen. *Lepigonum*
Macrothecum etc.

We only had three days
& came away hoping to
get back again in future.

Hemizonia fasciculata &
Streptia common, & another
(not in bloom yet)
one, which looked like fungus.

I hope you may find
something interesting in the few
things we are able to send.

I am waiting anxiously
for Dr Watson to find
time to review ^{& return} my last
list sent several months
ago. — Whilst it keeps me
back some, I wait with
all patience for his leisure

and kindness.

I am sorry my present
bundle was made up before
I thought of Prof Seymour's
request for Fungi, will
try & remember it next
time.

Chelard tells me that
Eschsch. returned last week
from Guadalupe — with
some new species & new
genera! —

Well I could think of
anything more worth mentioning.

So with gladness for
your visit & safe return,
& wishes for much
more time for your great
work — & kind remembrance
to Mrs Gray

Yours &c
J. R. Gray

314 S. Hill
Los Angeles Cal
July 30th - 85

My Dear Dr Watson

Many thanks for
your kindness in looking
over my plants. I will
perhaps write you again
after I have time to look
over the whole batch.

Last year I sent
a Hemizonia to Dr Gray
as H. Fitchii. He corrected
it to H. Parryi - But
I have never made the
change as it is so utterly
unlike H. Parryi. You had
some of the same & sent
it to Greene on my advice
to see if it could be Parryi.
Greene - says it is new

- More Amen

Yours &c

J. C. Nevin

Photo of Phil's has a
copy of the latter, but
at a figure I cannot
afford.

With kind regards, this
yours affly,

J. C. Merwin

It strikes me that Greene
is a long way off the
mark in putting *Lyon-Thomson*
near & possibly a section
of *Vauquelinia*. I am
now satisfied that even
that it belongs to *Saxifragaceae*.
The winged look of the
seeds (as yet imperfect) and
evident appearance of albumen
& whole habit are intriguing.
J.C.M.

314 S. Hill
Los Angeles Cal
Sep 8th 85

My Dear Dr Pray

In answer to your
card of inquiry I would
say that the two forms (at
least so I take them) of *Loeschi*
^{914 a-b.} *Matthessii*, were collected
at Lang on the S. P. R. R
a few miles beyond Newhall.

I believe Greene
has intimated to Mr
Lyon that the *Hemizonia*
I sent to you two years
or so ago as *H. Fitchii*
& which you returned as
H. Paerzi, is likely to be
H. Lyonii, Greene.

He has also written

to Mr. L. that he has now set about writing an elaborate flora of the Pacific Coast. He has not mentioned the fact to me. I guess he has thrown me overboard. In answer to a request from Cleveland for exchange, I said I could not furnish specimens for near the number I had, as I only aimed in collecting to secure three good specimens of each - one for self one for Cambridge & one for our friend Hance.

C. communicated this to Green, & he did not call to see us - afterwards writing me

when I sent him spec. of the new Clements plants, he said he had not called, as he had not hoped to see anything.

Well - I can't discard Dr. Gray for friend Green if that is what he wants,

I see he has been ^{been} making a number of new *Regimithias*. do not like Clements spec. I sent you one of them?

Could you send me a scrap of *H. ambigua* - typical? and a typical specimen of *Echin latiflorus*? I want to call your attention again to those *Echis* - bumping among *S. exaristata* & *S. trinitatis* - sometimes.

Also, if you know of a chance for me to get a copy of *Seiden* (or *lett*) Bot. *Willis* 1840, & *Widman* Bot. of Kings *Exhibiti*, of 1840 season of the year

314 S. Hill St.
Los Angeles Cal
Oct 23, 85-

My Dear Dr Gray

I have been
very negligent in answer-
ing your kind letter. I
have not been able
to be in my "den" for
almost a month.

I have a house in the
way of being built & in
an unguarded moment
I ventured to do some
lifting. This, my back,
would not stand. As
a result I have been
laid aside by lumbago
verging towards Sciatica
as a result of the strain.

I hope you know

Enough of such an
affliction ^{not} (by experience
but by observation) to
understand how I
have been so negligent.

I shall be delighted
to get the book you
so kindly offer me
& will gladly reimburse
you all the expense
of sending by mail
(books i.e. single vols.
over 4 lbs can be
mailed) as well as
any value you may
place on the book
besides.

I have some plants
to send you - & would
even this have done
so, if the present dis-
ability had not befallen me.

I shall for ever your letter notes
with great interest & care as soon
as they reach me.

Thank you of course for
sending them for some weeks.
Hope before long to get my
botanical legs back again.

With very kind regards to
 yourself & the mother.

Yours

J. C. Merriam

630 S. Fort st
Los Angeles, Cal.
June 29, '86

My Dear Dr. Gray

I have just returned from a long hard drive - been out trying to find the *Berberis Nevadensis* (?) in fruit, but in vain. The region around ^{the place} where I collected the spec. has been in the hands of new settlers, & they prove to be as great vandals as the sheep. The next year, after I collected it, I saw a wagon-load of wood for sale on the street. evidently of that same *Berberis* & - possibly the identical one referred to. I will still

look out for it at every opportunity. Friend Lyce has gone into the nursery & flower business on his own account - so tying his hands almost completely for field work. The last eight months have found me also harassed on all sides. I hope soon to be able to get at work again.

I beg to acknowledge receipt of your last communication to the Academy - also a copy of Dr Watson's last for which I return him, through you, my best thanks.

Dr Parry writes me that he is going to reduce *Enigoum Crerentatum* to

E. angustatum; I have not yet got my own consent to this. I am also not quite sure that the Dr's name basis for classification is practicable. I am afraid it is too arbitrary for ordinary practical use.

I am sorry I could not give earlier attention to your request.

With kindest regards & best wishes

I am, as ever,

Yours
W. H. Cresson

The Barkers were a widely low branching Abak - about 7 or 8 feet high growing in the sandy plain with the *Cladonia* (barkusae), *Asplenium* (barkusae), *Crucifera* - *Crucifera* etc.

680 So. Fort St.

Los Angeles, Cal.,

Nov. 21 ¹⁸⁸⁷

My Dear Dr Eay

Rhus Laurena is
innocuous to most
persons - but I have
one lady acquaintance
who is unpleasantly affected
by it. ^{modified} You have doubtless
the rank smell that is
peculiar to all of our
species - has perhaps in
R. integrifolia & *R. ovata*.

It would only be natural
to find more or less of the
poisonous property in each.

To many persons *R.*
aromatica & *R. trilobata* is
as poisonous as *R. diversiloba*.
But give a note on *R. diversiloba* a
few days ago.

Yours as ever

J. C. Merriam

Dr. Gray

Dear Sir

I neglected to
enclose the botanical plant-
which I described in my
letter yesterday. You will
find it inclosed

Very truly yours

R. D. Meems

It is the *Lilium pudicum*
of ~~Pursh~~ Pursh. =
= *Antillaria* strans, *pudica* &

A. Gray

Scutellaria / *ericum*, Raf. Nov. 11, 1.13. = *Scutellaria*, Raf.
multicaulis 50

Achillea millefolium
gracilis (H. B. K.)
ptarmica
astacea
lunata, Nutt.
asplenifolia, Ph.
montana, Ph. } 10

Aconitum *incanum*, L. }
Aconitum }
blepharicum }
truncatum }
diversum }
canadense } 56
napellus }
fischeri }
officinale } 1.13
delphinifolium }

Aster ruber, L. 60
alba, "

Anemone *alba*, 61 *canadensis*, Raf.
actinomorpha *equivoca* 61. *altissima*, L.
patens (H. B. K.)
frankii (H. B. K.)
helianthoides, L. 61
estivalis, L. 61 *lucida*, L.

Asclepias *perfoliata*, L. (H. B. K.)

Asclepias *pulchella*, L. (H. B. K.)
maritima, L. (H. B. K.)

Asclepias *syriaca*, L. 62

Asclepias *virginica*, L. 65

Asclepias *speciosa*, L. 65

Asclepias *risigena*, L. 65

Asclepias *monarda*, L. 3.14

Asclepias *oblongifolia*, L. 3.15

Shrub 2-5 ft high

Leaves. Thick, sub. with appressed hairs
above, and on veins below, petiolate
ovate, acuminate, serrate dentate,
stipulate, petioles $\frac{1}{2}$ inch long.

Calyx; monosepalous 5 parted, ^{green} deflexed,
foliaceous, ciliate dentate.

Petals. none.

Stamens oo. hypogynous, $\frac{1}{2}$ as long as calyx
conspicuous

Style. Two lobed.

^{above} Capsules 2, distinct; white when

Style. 2 more ^{from same base} as long as stamens.

Flowers axillary and terminal on
peduncles more or less as long as leaves.
Sometimes 2-4 crowded on the
summit of the short leafy branch.
Grows in thickets on rocky cliffs. in rich
soil.

Arkansas May 11, '58.

My Dear

Dear Sir.

I take the liberty
of sending you a plant that I have
been unable to determine. I cannot
think it undetermined as it is not rare
though not common I found the
specimen which I send. but you
before I procured your valuable
Manual. and have not been able
to procure a specimen for analysis
since. Although I cannot think it
unknown to you I will take the
liberty to affix a description thus made.

I send also a Sedum which
is undetermined in your Manual unless
it may be called *S. pulchellum*. from
which it differs in color and in that it

has very rough, three spikes. It is found
the same locality as the stone, I should
not think it worth sending you and
this year I not send it. The stone
I have the satisfaction of believing it
will reach you quite fresh as now after
three weeks it is yet better than
in press.

Please do me the favour to
send the names of three tied plants and
enclose and direct as to the accompanying
envelope.

Very Respectful
your obedient servant
R. L. Brown

interesting plants on my way to
Huntsville over the Penn. Mts. but
I was not yet born able to study them
up. I was much surprised to find
Fuchsia Carolinensis, which I had
only seen in Michigan, long ago in my
first studies of the science.

Two years ago I began with Prof. Thome
to make a register of the flora of
this neighborhood, but before we had
taken our first ramble together he
was lost to us and to the scientific
world, & death, since then I have
pursued the study alone, with more
regret for his loss, both as a friend
and a teacher. In these studies
I have collected 3 or 4 binders
filled, and now a large number
upon my shelf of "nomenclature"
of these I think soon may be well
and more imperfectly and incorrectly
placed, nothing would give me
greater pleasure than to beget them

R.D. Newins
Christ Church Rectory
Herkalood May 29th 1838.

Prof Asa Gray.
Dear Sir

Your very kind and
pleasing answer to my letter of the 11th inst.
wished my return from Huntsville
several days. I hasten to tell you of
my very agreeable surprise, at finding
that I had made a discovery, and
to thank you for the kind notice
you have taken of the same.
Had I not distrusted my own analysis
of the plant, attributing my failure in
it to ignorance. I should have sent
it a year ago. Since then I have learned
something more by the study of your
excellent books. Systematic & Linnaean
Botany, and ^{the} Manual, &c for which in
an humble way, as a new try, I
thank you in the name of the
lovers of the herbal craft.

Failing in my analysis, I submitted
the plant to Dr Garland of the Museum
who agreed with me in thinking it a
new species under *Spiraea*. If a new
genus we did not know.

I regret that I did not correct a
mistake that was manifest to me
in comparing an analysis of the
dried specimen with my old analysis
of a year ago. I meant to correct it
but forgot it after the specimen was
prepared for the mail. The *Stemmas*
are manifestly ~~not~~ *hypogynous*.

I meant to say and should have said
did had I not thought it ^{un}necessary
to send you any description that the
absence of a corolla was ~~was~~ an
great hindrance in my analysis. I
am satisfied that there is none, as
I have ~~just~~ seen the plant in all stages
of flowering. I should say that
I was told in the neighborhood
where it grew that it was an *Euonymus* *sp. Amer.*

which I can hardly believe. Its
locality is 9 miles away, and I have
not been able to determine this
point but will watch it this winter.
I shall be very glad to see your
published ~~and~~ account of the
plant, which will I suppose be found
in the American Journal of Science
and nothing will give me greater
pleasure than to correspond with
you if you will do me the favor
to help me in my study. Regarding
these plants with which I have
found difficulty.

Regarding the *Tedum*, I cannot
find it is not, *S. Tul.* as I found
a *Tedum* on the Cumberland Promon-
tories, on my way to Huntsville, which
answers to *S. Tul.* except that the leaves
are clearly sessile and amplexicaul
Tedum *sp. virginicum*. I cannot compare
it with as I have not *Tul.* & *Geo.* *fl.*
I found many new and

to your criticism on opportunity.
In my rambles one of your old pupils
W. S. Wyman late of Montgomery, and
now Prof of Latin living in our Museum
is my frequent companion, and an
enthusiastic lover of the Science of
Botany with him I found this spring
a plant (enclosed) upon the rocky
margin of our river where we could
not correctly place. It seems to be
Phacelia bipinnatifida, or *Entola parviflora*
except for 5 sinuosa, or depressions in
the corolla tube about midway, very
much, as in *Kalmia latifolia*. I send
you a part of the only plant we
found. I have found also a
Cosmosanthus, whether *Furkii*, or
fimbriata I can scarcely tell in my
confusion. Gleason, Gray, Hooker,
Dorby, and Elliott. It seems however
to be *F. furkii*. I send a specimen
of this also.

Crossinial? is abundant here and
I will take pleasure in sending you
specimens with fruit if I am not
too late. And my dear Sir let me
add, I shall esteem myself fortunate
in being able to do you any service,
and you may command me in
every respect in which I may be able
to aid you in your invaluable
researches. I will send you
the specimens you desire, as soon
as I can go for them and prepare
them for the mail.

I am dear Sir

Very truly your Obedient

and Humble Servant

R. D. Robinson

My Commissioned library, and
should like much to get them
all as they come out
Yr

Please do me the favor to tell
Mr. if other volumes of ~~the~~
your ~~Library~~ to my be expected
soon. I have of the last and the
two volumes published from

I send also a few sprigs of the least
dry plants, and a few living roots.

Croonier is abundant. The localities
is corp. I found it Saturday 6 miles
away from this place, where it was first
discovered. I do not doubt it can
be found anywhere on the river for
miles above and below Tuskuluma.
The fruit is not yet mature. I send
some in its present state. I will
send you another box with Croonier
and *Leucocya* 1% as soon as the seeds
are ripened. I am daily working
on my *Ammonites*. as I get another
shance at them. I do not think them
of sufficient importance to justify my
giving you trouble with them.

I think you however very hearty for
your permission to do so. It is possible
that I may visit ^{my} home this summer
and so I will give you ^{my} Angel the
pleasure of bringing them to you.
My kind proposals notwithstanding
no for my expenditure in P.C. Stamps

Christ Church Rectory
Tuskuluma Jan 21.38

Prof Asa Gray

Dr Sir

Immediately on
receiving your kind note of the 8th inst
for which with your generous offer of
assistance in my study, and your valuable
Ltr - P.A. I thank you most sincerely
I arranged an excursion to the localities
of the new unknown and procure
the specimens herewith enclosed.
I send them immediately as the corals
are not fully perfected and would
wither in drying. I hope they will reach
you in good order. I send also a
specimen of the wood. The stems
has the general habit of growth of the
Philadelphia. and resembles it very
much except in foliage. In the trunk
where many things grow from the same
trunk, our tree is a very large one
another towards the living side of the trunk

forming a dense mass of foliage almost
superior to the sunlight. The shrub is
a very hardy and well worth cultivation.

In every instance I noticed that the
fruiting corbels which are very few as you
will see in proportion to the flowers.
one corbel was perfected to the obliteration
of the others which are truly as you said
mostly four. (They are very minute in the flower
never my mistake in my first examination)
I will not occupy space in detailing
my examination of the fruit, as I doubt
not it is sufficiently advanced to afford
you a satisfactory examination. Perhaps
^{it} ~~they~~ will be somewhat written.

I will still watch the ripening fruit
and send it to you when perfected.

If the plant proves to be a new genus
it would be gratifying to me and to my
friends and associates in the study.
Prof. Lyman is Dr. Mallet of the University
(I hope you know the latter gentleman also
at least by reputation) to be permitted

to name the genus in compliment
to our old and lamented friend Prof
Towner. — Towneya. —

I have no doubt the plant was known
to him, as he had studied the flora
of this neighborhood very thoroughly,
and that his sudden death cut short
in this instance, as in many others, a
further investigation. Please inform me
if this name will be agreeable to you.
If it will I will leave it to you. If
you please, the title and form of baptizing
and the pleasure as it will be such, I
doubt not of introducing ^{it} formally into
the family of known plants
and of making it known to science.

The Adonis has cast its bract and
has withered. It has scarcely any roots, as is
now signifies it has set upon the roots.
I have been almost too late for the seed
I send you however some chalk, with a
few cards, from which I have no doubt
you can secure living specimens next year

Permit me to say dear Sir that
aside from the pleasure and advantage
of a correspondence with you, I esteem
it a great privilege to contribute in any
way, to your success in collecting the Flora
of our Country. And I beg your permission
to send me to send you what I choose
at my own cost.

I heard of your new work now in
press, "How Plants Grow" some time since
and it was so perfectly the thing I
wanted - judging from your excellent
chapters on that subject in "Arct. & Alp.
Fl." - that I immediately ordered 20 copies
as soon as issued, for distribution
among my little (and big) friends.

You had the kindness to ask if I
could get the Flora of St. Anne, if left
for me at Ipswich & Thimble. I am
with great pleasure, yes, and I shall
ever be obliged. I will direct
Mr Daniel Sand, of whom I order
all my books to call and get it for

for me and send it with some
books I am now about to order.

I meant to have said above
that I beg you will give the name
of (if I may so call it).
Promega, its specific name.

If you wish a descriptive name
in brief, and the peculiarity of
its habitat will readily suggest
suggestions.

I beg you will do me the
favor to write to me soon letting
me know if this plant does
establish a new Genus, and
if you concur with me in the
choice of a name. For really my
interest in it and my desire to
call it by its own name,
and to communicate my designed
compliment, to Mrs. Promega
will hardly break delay.

I am dear Sir

With every expression of regard

Very truly yr. obt. Servt

R. D. Davies

stamens are almost as desolate
as specimens dried in the spring.
I am satisfied that it has no corolla
as indeed, I think you will be, when
you note again, the insertion of
the stamens upon the calyx.

Dr. Mallet who saw the plants which
I found a year ago is of the same
opinion. I have not the slightest
recollection of a bud. We looked
for some to settle the question of
the corolla but found none, on
the specimens from which we
worked. I wish Mr. Sprague, to
whom I try to be commended,
success in his estimations

I will gladly do for you and
Dr. Lindley all I can in making
a collection of our Orchids.

There are but few here, only a
few species under *Platanthera*
Spiranthes and *Corallorhiza*.

Cypripedium are said to be in the
neighborhood, but I have not yet
found any. Very truly your obt. Servant R. D. Wrona

Tuskaloosa
July 12th 1838.

Prof Wm Gray
Dear Sir

Your kind letter
of June is before me, and hasten
to thank you for your promptness
in writing as well as for cordial
agreement with me in naming
the new Erinus. Your disposition
to do me the immortal honor of
giving it my name, was pleasing to
me, but for less so than my ability
to honor the name of a most excellent
and deserving man. - my friend - in
such an enduring monument.

Our word as to the name.
Shall it be written *Erinoya* or *Thomasa*?
I think the former with the accent
thus *Eri-o-mey-a*. The name you
know is *Erinoy* - *Erinoy*, if written
Thomasa. The long diphthong *oy* must

is more likely to divert the accent from the first syllable than if written with the termination eya. I suppose it makes but little difference. Which termination is used, and eya is more true to the name. The name is Irish. Prof. I was himself from Ireland.

As to the Sedum I really hope it is used that I may thus of your favor enter of enrollment, in a more modest way than your ^{or} first design. The honorable and gentle guild of Botanists

I think however that you have mistaken my name, as indeed all people do to whom I do not particularly say. It is Stevies not Stebors. My name you will see is already latinized. Perhaps so long ago as when written Carinus of Horace. if so. Though I may not claim with modesty a descent so remote. I may with reasonable

pride. see my name (through your works) incidentally mentioned like this, upon a "monument more lasting than brass."

I went out yesterday for the fruit which you desire. Croonia is not yet perfected. I have several specimens in press for you, and will send you one of this or the next mail, as you desire. Though the plate in the Genera is as perfect as it is beautiful. - I will also send a fine specimen of Lronnaga, as you may want it for the same purpose.

The fruiting plants of Croonia are not more than 5 per cent. I for I cannot procure many seeds. I will however send all I can get. Lronnaga on this side the river is only one insignificant locality. I found not one perfected seed but many good specimens which as they retain the perfect

Yuskaloosa

Oct 18th 1884.

Prof Asa Gray

Dear Sir

I found it impossible
to visit Boston on my late visit home,
and to my great regret, was disappoint-
ed in my expectation of seeing you.
I did not, as I intended send you
my plants, because I found 3 Shady
Cistle a couple of very good Botomlets
in my water tower that it was
probable I had nothing valuable
to you. I am obliged to you
for two letters I received from
you, one in N.Y. and one atroid
and I hope you will now keep
the promise made in them and
advise me of the progress of
Linnaya &c. I am very glad
the Croomia reached you in good
condition I hope you will be
able to make something of them

I have a few more seeds of *Thompson*
which I will send enclosed, and
I have also some seeds of *Stemmatium*
luteum which I will gladly send
you if they will be of service to you.

I made good use of the few
plants I took on ~~with~~ ^{exchange} with me,
I got "Mr. Coe. determined specimens,
among them a good collection of
Mosses & ferns. and a large and
almost full bush of *Parica*.

I shall still keep working up my
studies. and will gladly serve you
in any way.

In the mean time accept my
thanks for your favor in introduc-
ing Thompson to the world.

And I trust to write as occa-
sion serves to

Ever &c your Obedt

and obedient servant

R. D. Meade

Can you tell me where I can get the names
of the orders printed as labels for my
Herbarium? Can you tell me also

where I can get the best and
the cheapest paper for the same
and what price.

Since I have received your answer
as soon as convenient I have
an order pending at one of our
home manufactures

Stevens

I shall now get Thompson
writing for.

I should not forget to say that
I brought home from "Flora of Brit."
for which I thank you most
heartily. As also for your little
work "Botany for Beginners"
I do not doubt it will be a
book for the times and I hope
it will prove a profitable one
to you and find large sales

Convinced, that, if it is not
the same plant, it is the same
Erinus, and equally good for the
purpose above mentioned if
you are a smoker I shall
be glad to send you one.
In Florida it is known as Indian
Red. though the name is a
misnomer.

Adjoin thanking you for your
distinguished kindness.

I am dear Sir

Your obedient servant
H. H. Thomas

Tuskaloosa,

Nov 16th 1888.

Prof. Geo. Gray.

You may know how greatly
I have been disappointed, & being antic-
ipated of Prof. Harvey. in choice of a
name for my new Erinus, when I
say that the discovery itself scarcely
gave me more pleasure than the
appertaining it afforded for honoring
the name of my deceased friend.

Prof. Harvey's compliment has given me
great pleasure, yet I cannot help
wishing that he had been a few months
later in publishing his book.

I do not see what can be done
but to accept your kind proposition
to give the Erinus the less honorable
name Revia, except it would be
proper to call it Tornara and
then to the usual note to designate

the mirror. I can hardly hope
however that you will think this
proper. I will leave the whole
matter entirely in your hands,
and by you will be grandfathered
to the New Enns.

I only fear that it will be found
in some less known book, that
I have been superseded in the
discovery. I do not however know
of any new work lately issued, or
about to be issued, except a new
Edition of Woods Botany.

I wish I had specimens to
send to him and Torrey, but I
must wait until Spring.

I am delighted with your
Botany for Beginners, and although
I have my class (I am instructing
in class in the School of the Young)
putty well on in the "Manual"
and do not need a more elementary

book now. I shall order some
for prizes, and gift books.
Many girls will study it when
they have left school, who will not
study the Manual.

I have never studied the Carol
at all, but with the advantage
of the determined species I have
procured by exchange I hope I
may be able to find the one you
want. In the mean time I
will watch the Carolina.

I must say that I find the
New Enns makes excellent pipe
stems. I will tell you how I
found it out. A friend of mine
brought me from Florida a pipe-stem
of superior quality. I noticed one
day, that it closely, yet not exactly,
resembled the New Enns,
and on examination of the wood
under the microscope I was

4
Hudson

Feb 27th

Mr John Gray

Dear Sir

I have just received
from you a paper containing
your Article upon the Irish Census
of Providence. And a few days before a
short came to me of your Handbook
containing your notice of Hervey
of Providence. I am greatly obliged to you
for both, and I take pleasure in
again expressing my obligations and
my thanks for your favor, and Handbook
shown in the matter of Providence. —
both in bringing it out, and in keeping
me apprised of its progress.

Your kind notice of my first intentions
in giving it a name, and your pleasing
~~tribute~~ tribute to Prof Loomis has
been peculiarly gratifying to me.
Your article is quite an imposition over

and it surprised me of its fulcrum.

I am glad to know that there is an importance in its discovery, aside from the discovery itself, in its bearing upon the affinities of other genera.

The Spring is now fast opening.

I am every day expecting to see the *Clytonia* for *Crocinia*, but for I shall be *Argemone*, and *Lapageria* (our first flowers) with the *Orchids*, in bloom.

My correspondence with you, has given me new zeal in the study of plants, especially as it has brought me across new titles I know, and what progress I can yet make.

Reversia will be in bloom in two weeks, and I shall make a large collection of specimens for distribution and exchange. I will furnish you with as many as you wish.

I hope you will tell me in your answer to this letter, if I may yet confidently send specimens to my friends. I do not know if you

designed to send a plate of it in the short which I have received no plate come with it. I suppose it is not yet published. I look for it with great interest.

I shall keep a sharp look-out for *Crocinia*, but for I shall be anxious to discover graminaceous birds in the right stage for determining the *quaratus hexata*.

Will you tell me how I can procure a copy of the Published Memoirs of the Acad. S. which contains your article upon *Reversia*? I have learned that the publications of the Soc. are not sent to our Ministry.

Please command me in all things in which I can serve you.

Very truly yours
and at command
J. S. Merriam

Portland Oregon
March 13th 1873.

Dr. Allen Gray.

My dear Sir.

Have you published
or are you about to publish a
Text Book of Botany which will
include our plants of the Pacific
Slope? We have nothing but
your two volumes of the Flora
of North America. That is of service
to us. Perhaps you have published
additional Volumes. — It is long
since I have done anything in Botany
save with the Mosses. But there are
so many new plants here and so
many intricate species continually
applying to me that I find my old
love for the Phragmaceae returns
upon me. And so I find myself

turning to you in my difficulties
as I used to do. — By the way,
how does *Pericaria Murex* in
Cambridge? Has it come to you
from any other quarter than
Tuscaloosa? Can you not
have a few roots sent me by
mail. Get this Spring?

I enclose a beautiful
little plant which I gathered
without examination ^{while travelling} as the first
that I had seen. It seems to
be an enduring puzzle of the
botanical students here. And
at the request of a friend I
put in my envelope a fresh
specimen of another.

The flower of the first reminds
me in its general appearance of
Elephantopus. Prof. Wood whom
I have referred it to Karaceae.
The petals seemed to me to be

distinct and clawed. They are
deeply and narrowly cleft through
the whole limb! of the five lobes
the middle one much the largest
and longest. — Note the singular
pubescence of the whole plant. —

The second plant is thought
to be ⁱⁿ ~~an~~ *Asclepiadaceae*. It may
be found any time during the winter
after a few warm days.

My object in writing is to
learn if as we hope you are to
help us in our need by supplying
text books. The need is universal
here. And the author who will first
supply it will secure large sales.
I hope for the work like, and for
your sake, that the Book will bear
your so well known and honored name.
I remain, very truly,
Your old correspondent
and friend. R. J. Mevius.

Olympia W. T.
Nov. 16th 1883

My dear Sir,

I have a letter
from Dr. Satchap La Paul
School Puna Waila for
whom I procured at Botany
California two years ago
to ask if I can get him
another at the same
price. \$800. Can I be done?
If so please order the volume
sent. And expect the money
for the same, immediately
from him.

Admrs H & Satchap S D
Waila Waila.

I have advised the
announcement of the pub-
lication of the proposed
book on Good Measures of what
I think

It may have been said
and ^{that} the announcement
has escaped my notice

If so please send
the book back to me
at once. I enclose a
stamped envelope

I have a puzzle which
I refer to you for an
early answer. Will you
please give me the names
of the enclosed? One or two
other matters I refer to Dr.
Gray glad to find an excuse
for writing to him at this time
when all are congratulating
him, and none more heartily than I.

Very truly yours,
R. D. Meade

Olympia Wash^{ter} Ter.
Nov. 18th 1883.

My dear Doctor Gray

May I claim a place
among the friends who will crowd
around you to-day for congratulations?

There are many of us who have
never seen your face who must never-
theless feel well acquainted with you
because of the freedom with which you
have permitted them to approach you
for personal assistance by letter in
their otherwise unaided studies.

I hope you will permit me
to say, thank you kindly for what
you have done for me, and at the time
when you helped me to come into
the brotherhood of naturalists with a
new genus in my hand has wrought
in me an affection which claims a
place among your friends more favored
in that only that they have had more
frequent and more familiar intercourse

With you

Let me come to you as of old
once more with a specimen in my
hands and a drive for assistance

I confess it is a scheme not un-
worthy I hope. for securing a note from
you. Yet I am not without a hope
of giving you pleasure.

The enclosed fronds, which I have
never but once seen growing were
found by me in a shallow barathic
dish or basin near Spokane Falls.
It grows in a floating tangle and
expands laterally and rectangularly
from fixures in the edge of the fronds
which separate, surface from surface.
I suppose it is rooted, yet because
of its fragile character I could not
determine this as a fact.

I should be very glad to know
something about this if you can
spare the time.

I have today been mounting
some peristomes, and some diatoms in
situ. which latter are very fine. and
the former may be of interest to your

friends if not to you. I have spent
part of the day in mounting them for
you. If you will accept them it
will give me pleasure. Should they
be such an old story to you as to
add only duplicates to your cabinet
of slides. It will please me if you
will give them to any of your
correspondents to whom they will
give pleasure. I am afraid I cannot
send them until the cement dries
a little. And I shall hold my
letter from the mail until
I can send the package with
it. Hoping that your friends and
the public whom you have so long
served by your published books may
congratulate you on many happy
birthdays

I am ever honored Sir
Very truly yours

R. S. Weir

Hympie N. J.
Dec. 16th 1884-

Dear Mr. Watson

I send a package of slides to day. I could not get them ready before because the cement was too green to clean even imperfectly. And I fear that when they arrive ~~the~~ it will not do to handle the slides for some time.

I have never seen any printings mounted save my own. They may be common numbers, and not well done. They will reach you in time to let me add to your Christmas log by the assistance of my most kind and affectionate regards.

I send a postal card to pay for the Masses of St. A. and thank you for your many favors

Very truly yours

H. J. Nevins

North Yarmouth N.S.
March 14th 88.

Dear Mr. Watson

I am thankful
that you keep me in mind
as witness to me now and
then your valued revisions
of which now I have a
good many. I have found
them so valuable that I
find I must have the
Bot. of St. America, and
beg you to have it sent
to me with the bill.

I am residing now
permanently it is hoped
at the East Church where
I have built though I
am engaged in building
another at Ellensburg

It is a grand holomeneal find
Even if one took only the
plants found in the very
streets of the town

Enclosed is one which I took
last spring from the streets
and was unable to study it
having no balance with me

Prof Henderson had a look
at it and found it a puzzle
I shall look for it now as
it comes into season

Meanwhile I would like
a report on it from you
Very truly yours
R. D. Merrill

North Yarmouth N.S.
Apr. 2^o 84

Mr Edward Watson

Dear Sir,

Pardon the issue
of Synoptical Church, &c.

(one)
Vol 1. part 1 of said Vol 2 part 2.
which we are all eagerly
expecting it would be very greatly
valued if you could send me.
Our missions of Canada which
you can show me other
than those Dr. Gray and you
have kindly sent me heretofore.
I recollect perfectly the
names of the several
States it is to be published
in. but I have not
a description of it. For. Pub. and
in circulation etc. March 1884
only was I in
A. For an accurate copy the
missions etc which I now have.
I understand that the

Frederickson, formerly of Penn.
The name of Frederickson is
appearing a second volume
of the Register and Providence. The
the work has already as far
it was abandoned in real,
estate speculation - But
in Boston he is knowing a
man near Tacoma and
Pugget. There is even a tide
of immigration than all
others in the state are doing.
and addition to addition
Our immigration, such
women and children
speculation and all the
are getting in on the rock
i.e. speculation from original
business are doubling their
money in a few months and
sometimes in a few days
or weeks.

The name of the

Frederickson

Nov. 2/79

I have Vol. 1st Flora of Amer.
1886-87. given me by Dr. Gray
Also Vol. 2nd section a yellow
note by the Synoptical Flora
What I mean is that that Vol
1st will be recommended to you.
I shall write today thanking the
Sec. of the Smithsonian, and men
for 1st part of Bibliography
Index, which the professor of the
Synoptical Flora informs me
is issued. I shall not go far
in the Mountains. I mean
to go the summer to the coast
and may go towards the Rocky
Mountains. Alluvial has had
a boom, and has grown out
of all reason. There are many
over a work, flowers there yet
I wish you could have
heard the name of
the man I mean in the
book.

I wish I had known of you
passing in 1840. when I had
known a man to overcome you
from Cass & Athens to Louisville
I would have asked to be
your correspondent. I cannot
say why I did not think it so
a day's ride with you at
least.

Do you know of any one
engaged in making a good
School History of D. & W. State.

My address will be as
above for some time, as
I have made this my central
station and have built up
a little College here.

I wish you or any of yours
could drop in on me and see
and claim hospitality and best
service from

Wm. H. Garrison

Wm. H. Garrison

GENERAL HEADQUARTERS,
NATIONAL GUARD OF WASHINGTON.

ADJUTANT GENERAL'S OFFICE.

R. G. O'BRIEN,
BRIGADIER GENERAL AND ADJUTANT GENERAL.

OLYMPIA, WASHINGTON, May 12th 1891

My dear Mr. Watson
Will you be so kind
as to give the enclosed proper
direction.

My present address is
Hagglum, Wash. The new center
of the work as General Missionary
The work is in towns along
the coast including South
Island. The Pacific coast terminus
of the N. P. Port Hood.

I have five stations and two
church buildings in hand
and find no time for writing
to you. With very cordial
 regards, for I have
large opportunities for service

Very truly yours

L. D. Lewis

GENERAL HEADQUARTERS,
NATIONAL GUARD OF WASHINGTON.

ADJUTANT GENERAL'S OFFICE.

R. G. O'BRIEN,
BRIGADIER GENERAL AND ADJUTANT GENERAL.

Reverend

WASHINGTON, May 12th 1891

1891

The Curator of
Botanical Garden
Cambridge Mass
Dear Sir,

Though it is late for
packages of such by mail, I
will be greatly obliged if
you will send a labeled package
of Crucifera of Laburnum
to Mrs. S. F. Whit

of the Wright Seminary
Providence Rhode

Island will please see to the return
of its dissection, etc.

Acquaintance with
I send stamps for postage.
I should be glad to know that it is
well for you, - in case you will
it should give you very pleasant
to see in the future. I should
Very truly yours R. G. O'Brien

1111

Emmanuel Parish
Archipelago De Haro

East Sound
San Juan Co.
Washington

June 30th 1894

My dear Prof. Dutton

Yesterday looking for diatoms
on Eastern Harina along shore I found
a perfect plant fringing / and remembering
that you long ago asked me to send
you a fringing specimen, and so I
mail it to you. With it I send
another fringing stem of what I suppose
is a kelp. Will you give me its name?

This is a part of this state of which
you know so much. which is probably not
at all known to you. It is the largest
island in the Archipelago De Haro.
It has two mountain ridges rising two
or three 1450. The others 2200 feet one on
each side of a very long straight arm of
the sea which nearly cuts the island
into two equal parts, a protected sound
one mile wide. The island has a climate
of San Francisco and is an ideal soil for
fruits, and is occupied by small farmers.
and fruit culture and a large scale.
It is an ideal place. I try to spend
a few days there every year and am

happy now I can find an opportunity
of coming down for even one day.
And now I build my cattle for spending
a barren old age if ever I must retire
from active work. With nothing to
encourage and give a prospect of gain
before the end.

Thank you for receiving
for my friend a mass of steamers.
It will grow very well now.

I think that with you it is not
so much climatic difficulties which
affect it as a want of loose rich soil
^{and plenty of sunshine.}
In the native place on the first soil
under a perpendicular rock rock (bay cliff)
I could pull up perfect roots by hand
by simply pulling and shaking the loose
virgin soil from its roots. It spreads
from the roots and makes a long
ledge like thickets which in season is
covered with blossoms.

Very Truly yours
R. D. Lewis

The
... ..
... ..
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... ..

Had been there since
 and it was proved to
 the fact of the matter
 in the end. The
 same thing was
 seen in the other
 the 5. 10. 15. 20. 25. 30. 35. 40. 45. 50. 55. 60. 65. 70. 75. 80. 85. 90. 95. 100. 105. 110. 115. 120. 125. 130. 135. 140. 145. 150. 155. 160. 165. 170. 175. 180. 185. 190. 195. 200. 205. 210. 215. 220. 225. 230. 235. 240. 245. 250. 255. 260. 265. 270. 275. 280. 285. 290. 295. 300. 305. 310. 315. 320. 325. 330. 335. 340. 345. 350. 355. 360. 365. 370. 375. 380. 385. 390. 395. 400. 405. 410. 415. 420. 425. 430. 435. 440. 445. 450. 455. 460. 465. 470. 475. 480. 485. 490. 495. 500. 505. 510. 515. 520. 525. 530. 535. 540. 545. 550. 555. 560. 565. 570. 575. 580. 585. 590. 595. 600. 605. 610. 615. 620. 625. 630. 635. 640. 645. 650. 655. 660. 665. 670. 675. 680. 685. 690. 695. 700. 705. 710. 715. 720. 725. 730. 735. 740. 745. 750. 755. 760. 765. 770. 775. 780. 785. 790. 795. 800. 805. 810. 815. 820. 825. 830. 835. 840. 845. 850. 855. 860. 865. 870. 875. 880. 885. 890. 895. 900. 905. 910. 915. 920. 925. 930. 935. 940. 945. 950. 955. 960. 965. 970. 975. 980. 985. 990. 995. 1000. 1005. 1010. 1015. 1020. 1025. 1030. 1035. 1040. 1045. 1050. 1055. 1060. 1065. 1070. 1075. 1080. 1085. 1090. 1095. 1100. 1105. 1110. 1115. 1120. 1125. 1130. 1135. 1140. 1145. 1150. 1155. 1160. 1165. 1170. 1175. 1180. 1185. 1190. 1195. 1200. 1205. 1210. 1215. 1220. 1225. 1230. 1235. 1240. 1245. 1250. 1255. 1260. 1265. 1270. 1275. 1280. 1285. 1290. 1295. 1300. 1305. 1310. 1315. 1320. 1325. 1330. 1335. 1340. 1345. 1350. 1355. 1360. 1365. 1370. 1375. 1380. 1385. 1390. 1395. 1400. 1405. 1410. 1415. 1420. 1425. 1430. 1435. 1440. 1445. 1450. 1455. 1460. 1465. 1470. 1475. 1480. 1485. 1490. 1495. 1500. 1505. 1510. 1515. 1520. 1525. 1530. 1535. 1540. 1545. 1550. 1555. 1560. 1565. 1570. 1575. 1580. 1585. 1590. 1595. 1600. 1605. 1610. 1615. 1620. 1625. 1630. 1635. 1640. 1645. 1650. 1655. 1660. 1665. 1670. 1675. 1680. 1685. 1690. 1695. 1700. 1705. 1710. 1715. 1720. 1725. 1730. 1735. 1740. 1745. 1750. 1755. 1760. 1765. 1770. 1775. 1780. 1785. 1790. 1795. 1800. 1805. 1810. 1815. 1820. 1825. 1830. 1835. 1840. 1845. 1850. 1855. 1860. 1865. 1870. 1875. 1880. 1885. 1890. 1895. 1900. 1905. 1910. 1915. 1920. 1925. 1930. 1935. 1940. 1945. 1950. 1955. 1960. 1965. 1970. 1975. 1980. 1985. 1990. 1995. 2000. 2005. 2010. 2015. 2020. 2025. 2030. 2035. 2040. 2045. 2050. 2055. 2060. 2065. 2070. 2075. 2080. 2085. 2090. 2095. 2100. 2105. 2110. 2115. 2120. 2125. 2130. 2135. 2140. 2145. 2150. 2155. 2160. 2165. 2170. 2175. 2180. 2185. 2190. 2195. 2200. 2205. 2210. 2215. 2220. 2225. 2230. 2235. 2240. 2245. 2250. 2255. 2260. 2265. 2270. 2275. 2280. 2285. 2290. 2295. 2300. 2305. 2310. 2315. 2320. 2325. 2330. 2335. 2340. 2345. 2350. 2355. 2360. 2365. 2370. 2375. 2380. 2385. 2390. 2395. 2400. 2405. 2410. 2415. 2420. 2425. 2430. 2435. 2440. 2445. 2450. 2455. 2460. 2465. 2470. 2475. 2480. 2485. 2490. 2495. 2500. 2505. 2510. 2515. 2520. 2525. 2530. 2535. 2540. 2545. 2550. 2555. 2560. 2565. 2570. 2575. 2580. 2585. 2590. 2595. 2600. 2605. 2610. 2615. 2620. 2625. 2630. 2635. 2640. 2645. 2650. 2655. 2660. 2665. 2670. 2675. 2680. 2685. 2690. 2695. 2700. 2705. 2710. 2715. 2720. 2725. 2730. 2735. 2740. 2745. 2750. 2755. 2760. 2765. 2770. 2775. 2780. 2785. 2790. 2795. 2800. 2805. 2810. 2815. 2820. 2825. 2830. 2835. 2840. 2845. 2850. 2855. 2860. 2865. 2870. 2875. 2880. 2885. 2890. 2895. 2900. 2905. 2910. 2915. 2920. 2925. 2930. 2935. 2940. 2945. 2950. 2955. 2960. 2965. 2970. 2975. 2980. 2985. 2990. 2995. 3000. 3005. 3010. 3015. 3020. 3025. 3030. 3035. 3040. 3045. 3050. 3055. 3060. 3065. 3070. 3075. 3080. 3085. 3090. 3095. 3100. 3105. 3110. 3115. 3120. 3125. 3130. 3135. 3140. 3145. 3150. 3155. 3160. 3165. 3170. 3175. 3180. 3185. 3190. 3195. 3200. 3205. 3210. 3215. 3220. 3225. 3230. 3235. 3240. 3245. 3250. 3255. 3260. 3265. 3270. 3275. 3280. 3285. 3290. 3295. 3300. 3305. 3310. 3315. 3320. 3325. 3330. 3335. 3340. 3345. 3350. 3355. 3360. 3365. 3370. 3375. 3380. 3385. 3390. 3395. 3400. 3405. 3410. 3415. 3420. 3425. 3430. 3435. 3440. 3445. 3450. 3455. 3460. 3465. 3470. 3475. 3480. 3485. 3490. 3495. 3500. 3505. 3510. 3515. 3520. 3525. 3530. 3535. 3540. 3545. 3550.

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Washington DC

Feb. 28 1856

Mr. Asa Gray

Dear Sir

I received your very
kind letter with great pleasure, a few
days since, — I feel myself under
special obligations to you for your
unusually kind and generous pro-
position that I should come and work
up my plants with your assistance
I shall hope to be able to avail myself
of your proposed aid if I can do
so without putting you to inconvenience
in the course of a few weeks.

I am now very busily engaged
in writing up my geological notes
and cannot take up the plants
till that work is done

Very Respectfully
Yours
G. S. Edwards

Took them over. —

The weather here is unusually hot
thermometer varying yesterday from
94° to 101° — with shade — ~~and~~
completely prostrated by the heat &
hardly able to stir up — I shall
therefore leave Mr. put as soon as
permitted — and be glad to hear
from you this week. as I must
leave as early as Monday if next
week.

Very Truly Yours

John S. Newberry

Prof. Cha. Gray
Cambridge Mass }

Washington DC

June 29. 1856

Dear Sir

I have been much
longer detained here w. W. by the
preparation of my notes on the
Zoology of the West; than I anticipated
and have not heretofore been able to
accept your very kind offer of the
use of your botanical machinery
and your state more desirable personal
aid in the determination of my
Californian Oregon plants; —

I now fear I shall be too late
to find you at home when I am
able to go to Cambridge.

Will you have the kindness to
write me, as soon as possible, after the receipt
of this informing me when your
Commencement takes place at
Harvard.

and whether you are expecting to
spend any part of the summer at
home -

I have a few more seeds of
winter plants, which I send by mail
today - I am quite anxious to hear
how you succeeded in your efforts to
germinate the others -

Smith has been moderately successful
with the series furnished him - has
several of the *Conifus* growing, among
others the *Thuja gigantea*, of which
I thought at least a hundred plants
all lost by the Express Co - but
few seeds. -

Of the Liliaceous plants - *Lilium Cal-*
ochortus, *Antillarum*, *Cyclobotria*, *Proelia*
etc - the bulbs have all failed - and
the seeds have therefore become our only
dependence - Some of them are exceedingly
beautiful and are among I think new
I should be very glad to find some

at least one propagation - and
although this time trouble was
to buy the flowering plant from the seed
may seem, to great a price to pay for
it, still the addition of a single
new and beautiful flower to the
which now adorn our gardens &
Conservatories - are that I shall be
commonly cultivated and widely
diffused its humanizing influence
- for I regard all flowers as moral
teachers - Seems to me to be no in-
significant acquisition.

Dr. Kellogg of San Francisco, has
sent to me colored representations of
perhaps 200 species of flowers from Central
& Southern California including most
of those which he has described in
the proceedings of the California
Academy - I am now expecting
to take to Cambridge and me
when I go, thinking you would like

Washington D.C.

Dec 14. 1856

Dear Sir

I received your letter with the enclosed vouchers day before yesterday, and should have replied to it immediately, enclosing the cash, but Lieut. Williamson has been sick and is unable to sign a check. He is now better and I hope will do so today so that the money may be sent to you tomorrow.

The appropriation for our Survey has been nearly all taken up by a Quaternary work which we hope will not be paid. I have a large amount of work to do and compensation will be compelled to wait for some time longer to complete my geological report on the same terms. Eight will be left for me for illustrations, and I will see that the drawings of your new species are paid for.

Your letter received some time since has been misplaced, at the Smithsonian I suppose where I received it or how very busy, and just glanced at its contents, expecting to refer to them again. I have no remembrance of what you say about

scapiger - If I remember correctly it is
an orchis-like plant. of which one imbricated
specimen was contained in my collection, of
which I could tell you nothing - for I did
not collect it myself - it had been brought
over by Dr. Engelmann and was figured & described
by yourself ~~and~~ sorry for Whipple's report -

That you did not intend to figure it for
our report, I therefore gave it no special attention.

Mr. Samuels did not give it to me, for
he gave me no plants - but I think it is
unlikely that it was collected by him.

When Mr. Samuels' collections arrived at
the Smithsonian I was aiding Baird in acting
as Curator - I then supposed the plants as
well as the mammals belonged to this insti-
tution, and as one or two of the packages
were badly wet I took them out and carefully
checked them - Some of them I laid with my
plants from the same region but did not
find time to examine them at all. Before
I learned from Baird that the plants were
Samuels and not to go to Boston;

I therefore carefully unpacked ~~as I thought~~
everything I had received from Samuels' collection

and forwarded them all to Boston.

It is possible that this specimen scapiger
was taken for his collection and not up-
laced, though if so certainly not with any
intention of keeping it for myself.

This perhaps rendered probable the fact
that I have no distinct remembrance of obtaining
it from any one, and, in my strong conviction that
it came to me through the hands of an American.

I recollect quite a number of plants from Mr.
Ransom, Dr. Cooper & Heltz, Dr. Andrews & from
the vicinity of San Francisco when I was sick
with a fever, and yet was visiting as many times as
^{in any day} there one in collecting of numerous birds & quadrupeds
of which I made a large collection, giving to the plants
extraordinary, only so much attention as to put them in
a place of safety - Of nearly every plant collected by
myself I have a distinct remembrance, & have
notes, if those procured by gift or exchange I
know much less - If this plant is Samuels
no one would be better pleased than myself
to have the credit, what even that name be
of procuring it secured to him, and if it is not
Samuels it is of no possible value or importance
to me, like any thing else now or ever being

it would go to you for its amendment or description,
not contrary to my will but of my wish & choice
, and when it is described, and you have given to
Bogdan the shell of proofs of its coming to Samuels that
a perfection of its arcities, have yourself enjoyed the
system of publication, there is little left to me to
grieve or love - I certainly was dis. in. when they
say they. I know any thing submitted to the best au-
thorities, beyond that - I have no wish in the matter.

I leave you & Fony today, who shall name this
plant, i.e. when it shall be published. If O'Bogdan
who evidently has the first claim, does not care for it
& Samuels' plants are not to be published soon, I
should be pleased to have it published in our series
but of course have no feeling about it.

The plants sent by Mr Samuels I believe I
write you, not to trouble yourself about - When you
have made what use you wish of them send them to
me again - Selecting duplicates for yourself when desirable.

Summerhally occupied with Goring just now
not find a little to say with that. I have just sent a
splendid lot of Tertiary plants from the appomission
Platanus Alnus Populus Acer, Thuja Faxodeum &c &c
about 50 species, some fruits & flowers, Miocene and
many new, I want you to see them - Are you
coming to St. Louis next? - With compliments
to Mrs. Goss.

Yours Very Truly

John S. Newberry

With a hearty happy new
year. to you & Mrs. — I am

Yours very truly
John S. Hurd

Prof. Asa Gray
Cambridge
Mass

Washington D.C.
Dec 30. 1856

Dear Sir

The drawings came
safely to hand yesterday, and
I suppose you have set this
out the money for them —

They are very beautiful
and the plants they represent
must be interesting to botanists.

I see you changed the name
of the Stulsea, much to my
satisfaction. I should be still
better pleased if you had selected
some other specific name for
the Cint. tenuis & Stulsea. — What
do you say to putting Williamsonii
in place of Stulsea in
the first, and Stulsea in place
of the other — Perhaps, les officiers
could be pleased with the com-
pliment.

The sculptures you will make

such a duplicate of as you
think best. Of course if no-
one else wants it we shall
be glad to have it - and if
you think best credit it to Mr
Samuel - I am however anxious
that strict justice should be
done in the matter - more
particularly since I learn
that Howard, not knowing
more than myself the arrangement
with the Port Soc Nat Hist
described, several of Samuel's
papers in the proceedings of the
Phil. Academy - This gave some
dissatisfaction to the members of
the Port Soc Nat Hist, and
I should rather not have the
feeling increased -

Harvard should have
the plants you have described for
our report. Characterized in
the proceedings of the Port. Soc

Then could be no objection on
the part of the Socy I think.

I find by my Memoranda
that I left with you when
examined figures of new
Hulsea

Pentstemon Newberryi
" gracilistylus
" glaucophyllus
Gentiana.

For Gen. 'Sim. Jones'
Spiraealcea.

Polygonum

Barbata

Melittzia

~~Portulaca~~ 'Portulaca' (Portulaca)

Perhaps some others - Colaspis
I had not included - of which
I hope you will have figures made
when you think it desirable to
send the plants with those from
Dr. Anderson, where they are retained.

Washington, D. C. Mar 6th 1857

Prof. A. Gray

Dear Sir

I enclose seeds
of the Oregon "Salmon-berry".
Respectabilis? and a few more
of the Douglas Spruce. I shall
be able to send you some really
desirable seeds for your botanic
garden sowing.

Congress has appropriated \$15,000
for working up the natural col-
lection by the North Pacific Ex-
pedition. Wright's plants, & Stimpson's crabs
will therefore be described & figured.

Wright is in Cuba. I don't much
doubt whether he will be willing
to set down to the study of his
collections. But if so I know he
will desire to connect his name

a number of his plants as you
are willing to take for study
illustration.

Congress has also appropriated
\$17,000 — for filling up the
grand hall of the Smithsonian
and the arrangement thereof
of all the Government Natural
Collections — On this work I
shall perhaps have something
to do, and shall be glad
if you are willing, to avail
myself of your experience in
adoption of a system for the
arrangement of the plants
I will chiefly, before long
send you a plan of the hall
with the ideas which have
suggested themselves to us for
the accommodation of the

Botanical Specimens —

The inauguration ceremonies
passed off most pleasantly.

Mr. Eliza Jones is here
and well. With kindest
regards to Mr. Gray, I am

Yours faithfully
J. S. Newberry

than his soil road report and
tables of altitudes. Lat. Long. &c.

A degree of jealousy of the scientific
corps. which I find not expect
prevails the military portion of each
surveying party. and through them
has infected the entire War Dept
& especially the Corps Topo Engs

I have had my urgent invitations
to accompany the newly organized
Survey - to Oregon, Texas, California
New Mexico & Sonora - but shall
probably not go with any of them

Please send the drawing of
the Mountain by mail -
I should like to have the specific
name of Cercia Stewberryi changed
what will you substitute for it?

Please present my compliments to
Mrs. Steuberry
I remain faithfully
yours
John S. Steuberry

No.

Smithsonian Institution,

Washington, D. C. Apr 24. 1857

Dear Prof Gray

I rec^d your letter a day
or two since and learn that the
plants have since arrived.

I sincerely regret that they
have grown so small, and will
endeavor to spare you any similar
inflection

Coming from the region which
furnished most of Southern Cal.
plants, and containing many
duplicates from which you may
permitted to select. I supposed if
you could have the privilege of
looking them over without expense
you would be pleased to do so
particularly as I request you
not to put yourself to any unnecessary
inconvenience to them.

I do not expect to make any use
of them as they come from localities
beyond my range

I enclose \$10. to pay for the
drawing of the new *Leuticus*
I asked for an appropriation of
\$100; and obtained it. but reserved
for the drawings of your new
species; and the money was
ready to pay for drawings of
the other two new *Centetemonas*
P. gracilentus & *P. glaucophyllus*.

Or the uncertainty of ever
again having money waiting
to be expended in making illustrations
of these species - if you are satis-
fied they will stand it would
perhaps have been best to have
them drawn

My botanical report will be
illustrated by about a dozen
4 to 6 plates of entire trees, most
of which will be paid for by Govt.
- and by numerous outline wood-
cuts of which the drawings are
paid for out of my own pocket -

Beside which I have received no
compensation for my services since
Sept. last - The appropriation
for the Survey is not yet all
expended, but owing to the illness
of the Chief of the party - and
a splendid fellow - Lieut. Williamson
the control of the publication has
devolved on Lieut. H. L. Abbott
the second in Command - and
although from Cambridge, does not
special credit to the scientific
atmosphere of his place of origin
He is afraid this scientific
reports will prove more interesting

Inclos. \$10—
\$9. in bills
\$1. in gold

No. _____

Smithsonian Institution,

Washington, D. C. Apr 28. 1857

Dear Prof.
I find I omitted to
inclose the \$10. in my letter
of Saturday - I then fear send
it now - I believe I had
not answer your enquiry - made
some time since - if the
Smithsonian could not
furnish employment to a
curator of botany? -

Prof. Huxley would not
feel like incurring the
necessary expense, at least
for some years to come -

The collections are yet

to small to require
the services of a curator

The vastly larger collections
in zoology - geology &c -
are not yet under
the care & supervision of
a curator - though they
must soon be.

Have you any other a
description of Pinus Benthamiana
(Humboldt) &c. I suspect it to be
identical with P. brachyptera
of Engelman - or P. ponderosa
of Douglas - all of which
are perhaps but varieties
of P. rigida

I have one new Abies - a
beautiful species - a new
pine from the summit of the
Cascade Mts - and if I do
not adopt one of Douglas
names - to reduce synonymy
a new species of Picea

With compliments to
Mrs G. I am
Very Truly Yrs
J. S. Seward

Prof. Asa Gray
Cambridge
Mass

Marquette House,

W. S. BARKER & CO., Proprietors.

L. D. JACKSON, SUP'T.

W. S. BARKER,
GEO. BINGHAM,
L. D. JACKSON.

Lake Superior
Marquette, July 23, 1857

D. D. Gray.

I left. Washington some
six weeks since sick, and was
compelled to send in my report
in a very imperfect state of
preparation. I had hoped to
be able to return to N. in
time to revise it or at least
read proof. I am still so
ill however that it is out of
the question. I have been having
ague & chill fever. Last night
had a terrible chill, am just
able to write to request you
to read the proof not only
your part but mine of the
balance of report. and also
request you to make any

changes were suggested by
both a good taste -
for all which I hope to
have to repay you -

The - cherub-like berry of
this variety has white
flowers. perfectly white like
R. Nutkanis as I mentioned
to you - I will send you
specimens. - I suspect it
is not distinct from *R. odorata*

I had hoped to be at the
Montreal Meeting but fear
I shall not be well enough
with my complaints - to
attend.

Truly
Yours
J. S. Newberry

give value to our collections
either as regards to what
how or where to collect
My rule is to collect
every thing - but I shall be
able to transport much
more than before, and shall
try to obtain an abundance
of every thing -

My journal - the experience
of every day in Geology, Botany
& Zoology - showing particularly
the distribution of plants - was
deserve a publication of. Abbott
as infringing in his sacred pre-
rogative - If you would care
to take it over I will send
it to you - With compliments
to Mrs. G. - I am very truly
Yours
A. S. Henshaw

Auckland. O
Sept 2^d 1857

Dear Dr. Gray

Since I wrote
you from Lake Superior I
have been constantly improv-
ing in health, and am
now about as well as ever
I am expecting to
sail from N. York on
the 20th inst. for California
going out with Lieut. Dox
who commands an expedition
for the exploration of the
Colorado - I hope to go to
San Diego & cross over to Ft.
Suma. thence up the Colorado
returning to San Francisco
through the Gulf of California
collecting on its shores as far
as practicable -

I have been compelled to
make up my ~~former~~ report
on the botany of the region
formerly noted, so hastily
and when so incapable
of effort, that I am
ashamed of it. Aside
from that - when the
control of the upstr. of
our expedition passed from
the hands of Williamson
a most noble fellow, to
those of Abbot - quite
his opposite - I found not
only no assistance or cooperation
was to be expected from him
but all possible obstacles
threw in the way of the
pleasant and thorough
performance of my duty.
I hope this time to be

protected from any such
mortification & embarrassments
as I have hitherto suffered
and to be able to do something
which will really contribute
to a knowledge of the botany
of the Western Coast.
I shall confine myself
mainly to the trees and
the distribution of plants
in my future report, and
will use every effort to make
the collecting as full as possible
with a view to the acquisition
of new and interesting mat-
erial in the families which
particularly claim the attention
of Dr. Torrey & yourself.
Please write me at
Washington; with any
suggestions which will

Auckland 18, Sept

Dear Dr

Saw off tonight
Sam Kuia letter gave me
great pleasure, and Mrs
Netherby will send you
my journal. You will
find it a very rough
affair - It was written
down by a stenographer
from my dictation, and
should have been copied
before printing - Part
of it I have never
revised - ~~and~~ I should
be glad to have you
look it over, and if
any part of it is worthy
of publication please
have it published as
you suggest

I requested the printer
to send you proofs of
the bot. rept. and
Lieut Abbott also promised
to see that you had proof
sheets and 50 extra
copies for you -

I will write you
more at length by
the return of the
journal
With Compliments to
Mrs. G. -

Very faithfully
D. J. Harvey

Prof Geo. May
Cambridge
Mass.

New York, Oct 27th 1872

Some time since I published
several papers on the ancient
vegetation of our Continent
some of which I take the
liberty of sending you

You will see from them that
tray I first determined the
botanical character of our
Cretaceous flora, and the
facts which I reported, and
the conclusions I advanced were
accepted not only after long and
somewhat bitter discussion, in
which Lequeux, Her and
Marsen, were my opponents
but after Marsen & Capellini
had gone to the West, and
saw for themselves that I
was right. It is a little
rough, as the boys say, to have
my old antagonists in this
discussion, take all the credit
for what I advocated, and
then denied!

Prof Asa Gray
My dear Sir

I thank you sincerely
for your kindness in signing
the bond, and also now for
the good words, centered in your
letter.

Your signature would not
do on the bond, but 'tis good
with me for any draft of
reciprocity you may have
occasion to draw.

I am very grateful for
the permission you give my
boy to make the acquaintance
of Mr. Gray and yourself,
and in acceptance of your
kind invitation, have given him

a well-ordered education which
he will doubtless soon pursue.
He has been two years at the
Phillips Academy at Exeter
where he has left a good
reputation both for scholarship
and conduct. I have con-
siderable confidence that
he will become wiser and
more useful at Harvard, but
the trial is as severe one
and I am not without
anxiety about him.

Don't be a very great satisfaction
to me if he should prove
himself worthy of the friendly
interest of Mr. Gray & yourself.

No one who has not sent his
boy far away among strangers
can appreciate the preciousness
of such a privilege as you
are kind enough to tender him.
As he grows in years and
culture I trust he may

deserve and enjoy your
confidence and regard.

I have to thank you
also for the copies of your
very interesting address - I
had read it before, as it was
published in the journals,
but I am very glad to have
it in a separate form.

I doubt if there is anyone
of all who will read & enjoy
it to whom it will have the
interest and significance, it
has to me; for the subjects
of which it treats have been
matters of special thought
and observation ^{with me} for many
years. Had I known you
were to take up this theme
I could have supplied you
with considerable material
not yet published which you
might have found serviceable.

You will see from these papers also
that I have not only the first
but have been the only one to
recognize Glyptostrobus among
our Tertiary plants —

In addition to the documents
now sent I take the liberty
of calling your attention to
two letters of mine, and one
of Mr. Lequerens', in the
Journal of Science for 1860
March, May & September —
also to the article in the
Ancient Lakes, &c. in the
Naturalist for Jan'y 1871.

Though I have written nothing
flat on our fossil plants, I
have been constantly collecting
and studying them so that I
have now the finest collection
of fossil plants in this country
if not in the world — I have
large collections of which the
public know nothing as yet

Especially Triassic plants. (of
which so little has been known)
& Cretaceous & Tertiary plants
from the Western & Arctic portions
of the Continent. —

I hope to finish the Gal. Survey
of Ohio within a year, and then
to publish something more on
fossil botany. Meantime
it would give me the greatest
pleasure to show you my
collections, and to place at
your disposal any of my
materials published or un-
published. —

Once more thank you
for your kindness, and your
upat. I am

Yours very truly
J. S. Newberry

School of Mines, Columbian College,

CORNER 49TH STREET & 4TH AVENUE,

New York, Nov. 9th 1872

Prof Asa Gray

My dear Sir

Thanks for your
kind letter. — I was feel-
ing honored by your keeping
the documents to which
you refer — Don't trouble
yourself to mark your excellent
address by any notes or explana-
tions. I trust you will follow
up the subject, and do much
more to make the history
and derivations of our plants
known — When I go to
Cambridge again, I shall be
glad to show you some of
the specimens, on which my
conclusions are based

and have the benefit of
your judgement upon
them

Yours Very Truly
D. J. Newberry

flower, snow-white and two
to two and a half inches in diameter
At a distance it resembles Cornus
mutabilis of Oregon (which is
smaller and has larger & whiter
"flowers" than our C. Florida)
but the bush is denser, and
the flowers much more numerous.

It is not fairly represented in
the description, and is not
worthy of cultivation.

I enclose a bit pressed in
my note book. with flower of
average size. I have some larger.

With kind remembrances
to Mrs. Gray, & Prof. Watson

I am, Yours Very Truly
J. J. Newberry

School of Mines, Columbia College,

CORNER 49TH STREET & 4TH AVENUE.

New York, June 28th 1884

Prof. Asa Gray
My dear Sir

I have just returned from
Colorado and find your letter waiting
me.

I have compared the Lycium
you send with the type fragments
in the Torr. Herb. and find them
essentially alike. the only observable
difference being that your plant
is much stronger and the leaves
two to three times as large.

The flowers are quite the same
having the characteristic deeply-cut
calyx, the stamens not exserted to

Probably the type specimen is
from an arid district and does
not fairly represent the habit of the plant.

My visit to Colorado was very hurried; strictly on business and I was not able to do much in botany. I snatched a few things as I saw! but, no such time for botany has ever been known there before!

Heavy snows - The heaviest ever known - during the winter - The "Snowy Range", and Mt Gray ahead. Frost near - Still covered with an almost unbroken sheet of white - and Copious Spring rains, which have continued almost daily to the present time have made the country, both mountain & plain, a real flower-garden.

I collected a good lot of common things, *Asclepias*, *Clematis*, *Ceanothus*, *Lupinus*, *Grass*, *Phlox*, *Astragalus*,

Delphinium, *Phacelia*,
Physalis, *Arabis*, *Aquilegia*
Etc Etc -

The most beautiful of all the flowers I saw was the lovely *Aquilegia Coccinea* - which covers the slopes of the Front Range as it does those of the Wasatch. Why is it not cultivated under -

The lovely little *Leuco coccineum* which I found on the Mts above Boulder was new to me but is I think not rare.

Rubus deliciosus was the greatest surprise to me. It grows abundantly on the Mts about Cheyenne and at the time of my visit was in full flower. The

School of Mines, Columbia College,

CORNER 49TH STREET & 4TH AVENUE.

New York, Nov 9th 1885

Prof Asa Gray

My Dear Sir

Enclosed find my check
for \$13.50 to pay bill for
Flor. Brasil, Fas. XCIX.

This payment of this bill
properly belongs to the Library
but the Librarian will wait
the book before he can endorse
the bill and have it paid, so
I will pay it now, and when
you send on the fasciculus
I will take it to the library
with your receipted bill - already
received - and get my money
back.

(over)

you. - You can return that, as we have
duplicates.

You have seen these Flor. Brasil at the
Museum refer to Vol. VI. p. 60. and see what
other copy of Willmanns, Melchior's and
tell me what you think of it.
Since making the above I have hardly
mistaken a few of our many specimens, and
send you the Coquins, they are very rare
but do not exaggrate - Morrison does not do this
circumstances to a Compendium of the
Mammals of the
State of New York

I am getting a very interesting
flora from the New Jersey
Cretaceous clays - at least
100 species, and of some 100 or
more well marked specimens
- about 15 Conifers. perhaps
10 ferns. 2 cycads - The
other angiosperms
Apparently half the species
are identical with those described
by Her from the Cretaceous beds
of Greenland, and some are
identical with forms found
in the Cret. clays of Achen
(Steinla Chappel)

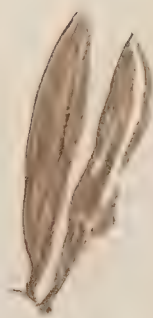
Among others there are a number
of specimens of what seems to
be a large composite flower!
with 3 to 4 inches in diameter
with involucre receptacle
achenes and ray florets
It seems to be related to

Williamsonia Cretaceous Her - other those described
Bot. VI. p. 59. Bot. XII. fig 1. Bot. XIII. fig 9 - (actual
one also here) but with the flowers widely ex-larved
I shall hope sometime to show you these things
and give you judgment upon them
Meanwhile I am very desirous to refer to
the description of the same. One of London
Bot. XXVI. but there is no copy of it in the
city. Could you not send it to me for a
day? Should be greatly obliged. - We have
most of the series but unfortunately not that
volume - I sent you the article on the
Cretaceous of the Cretaceous Bot. Hist. of London

Miss Green,



*Cuck in
Clay*



To know the financial
arrangement.

He would learn
much in a winter
and would be more
likely to find work
elsewhere, if you did
not need her hereafter.
(I mean to teach her
what I can this
winter.)

I do hope you
will not refuse, for
surely this arrangement
would not interfere with
anyone, and it shall
add you to nothing in
the future, if you make
it. I hope you will
give me a definite

answer "I-
(I) Saturday.
I wish
and this
note enclosed
to Miss Clark
and do not
know her
address.
Will you
kindly send
it at once?
Yours truly,
Jane H. Sewell

Dear Watson,
I have since so
busy this morning that
I did not like to
disturb you and
shall not be at the
Garden to-morrow, so
I will write a note
which you may consider
at your leisure.
We have some
money at my disposal
in this fund, if you
Sewell

can find her a place
in the Herbarium, that
is. I have enough
to pay her six dollars
a week through the
winter, which would
be about seven hours
a day at fifteen cents
an hour. I will give
that amount to you
to pay her with. If
her work proves satisfactory.
Of course; if it will
not, there would be
no obligation for either
of us to continue the
arrangement, as she

would understand that
she came on that
condition.

I think she
would do any work
in the Herbarium well
after she understood
it, and I am sure
she would learn to
determine plants, and
I cannot see why
she should ^{not} help in
the work of cataloguing.
She has an intense
love of study and
of botany in particular.
I shouldn't want her

18 Dec. 1888

Dear Professor Watson,

I herewith enclose a few flowers of our Persimmon. On receipt of your kind communication I could not put my hands on dried specimens of the tree in question. Now however that I have done so I send you two or three flowers which I take to be female. I was asked by Dr. Masters to write a few lines at a day's notice and as I did not like to trust my memory I purposely omitted

in size, colour and shape
of fruits etc.

I am

Dear Dr. Watson

Yours truly
Geo. Nicholson

any mention of sex of New
tree. We have no old flowering
male plants and that
probably accounts for sterility
of our plant. We are however
making a ~~new~~ plantation of
(8 or 10) young Biximmons
- seedlings. Some of these
will surely turn out male.

We cannot grow ~~some~~
of the Japanese species in
open air here: in Southern
France they make splendid
bushes and vary wonderfully

personally acquainted with
M^r Cooke; but my anxiety to oblige
le Comte de Hambro makes
me correctly recommend to you her
friend M^r Cooke, who will give
you and M^{rs} Asa Gray all sort of
information and pleasure.

I have not lost my taste for
botany for it concurs to etourdir,
it devient une véritable amie.

I feel severely the untimely death

Paris June the 16th.
1855

My Dear Sir

Several years, and
a revolution have passed away,
since I had the pleasure of seeing
you and M^{rs} Asa Gray; but
believe me, My Dear Sir, when
I say, that among the advantages
which I have had in the botanical

World, I do consider your acquaintance
as one of the first, and my hopes
are, that you and Mr^{rs} Asa Gray
have not yet forgotten poor
Dear Mr^r Webb's friend, Count
de Roe'. Your good heart
tells me that you have not, so I
take the liberty of introducing to
you and Mr^{rs} Asa Gray. Mr^r de Roe'

Earlier, a gentleman well-informed,
who intends visiting America with
the attention and respect your Country
deserves, I am sure you will do
all you can, to show him your
honor, and to procure him rays and
news to steer well his course wherever
he thinks proper. Pray receive my
best thanks for your kindness.

I must now add, that I am not

of Mr Webb, for he was a most
excellent friend, & alas! of late I am
dumb with grief; I have lost my dear
Mother, and I have at this moment
a son in the trenches, before
Sébastopol!!! The Sebest family
is in good health, the herbarium,
de la rue Montmorency, is still a favorite
haunt. Old Gay is always at work,
but not yet a member of the Institute.

Bessie

is quite at the head of all
our botanical doings, and is
working with a very clever hand
the old cryptogamicus world, and
Medell is a rising man.

Good bye, my Dear Sir, remember
me most kindly to Mr. Asa Gray,
and both of you remind that
you have in this part of the world
a good friend, et Souvenez

S'il vous plait, bon Cher Rousseau
de l'intérêt qu'il prendra vos
bons travaux botaniques.

Le Comte Frank de Nol'

that you will come free us
again before long - You probably
saw the picture of my big pitcher
in the Gardiners Chronicle of
the 3^d December? The baby we
saw at Betty's hothouse in
summer -

Give my kindest remembrance
to D. Gras & believe me
Yours & truly

Marianne North.

3 Dalston Street S.W.

26th Dec

Dear Mr. & Mrs. Gras

I think that card is the
very prettiest I have seen this
year, thank you so much for
it, I am so unfashionable I
never bought one of the prett-
y things, I hope the world will
accept my collection at Kew
as a sort of universal park
of Xmas cards, to which I have
given a life subscription -

for the benefit of all -

I go there every morning & work till after dark - but it all goes on slowly - I cannot make others work as I do.

The American end looks far too cold, with its pines & Sycamores. - & I should much like to add a good mass of Rhododendrons to it, in New Carolina with you, but fear I shall not be able to get there this next year - my building will hardly be really finished in time, & I mean to stick to the work till it is done - Brazil has

eaten up all the room I hoped to keep for Africa - & there has yet to be done - I probably next October will find me at the Cape - if all goes well -

You heard probably of Miss Tulivans accident - she is now I hope in Italy - but letter news of neighbours reaches me - You are likely to know more than I do - Dear little Joe Hooker has had an attack of fever, but is well again, & gone to spend Xmas with his grandfather - Mary Ewart is also away, but the books are safely in her flat - On all sides I have heard lamentations at losing you & Professor Asa Gray, I hope

Rip Franks lives 3 Victoria Street SW
at 103 in this street -
I would be ready to
go with you when you find
it's not a climbing journey
Dear Mrs. Asa Gra -
think of
please

Rip Franks asks me to
ask you if Professor Asa Gra
if you will come have tea
with her at 5 on Wednesday
next - She will show you some
other brothers treasure Jack
Mrs. Gatty who writes the pretty
little books about flowers &
to meet you - I have promised
to go at any rate if you
are not otherwise engaged?
I think you would like to go -
See the Christie collection -
Yours very truly
Marianne North

3 Victoria Street
15th October 5th W

Dear Charlotte

May I send you some
more friends of mine
Professor J. W. A. Gray
of Cambridge U. S. you
nobody else know
all about them. who
know anything of American

Botany - as Mr. Leach
would say they are
alloveracious people
to the last degree
they are only going to
be here for two days I
then I am sorry to say
home across the Atlantic
it is a pity such people
cannot be chopped up
into bits & kept in different

parts of the world to
enliven it

Catherine & Janet are
here both very well -
You will see them before
long

Ever yours affly
Dor

When are you coming to
see me?

3 Victoria Street S.W.
Monday

Dear Mr. Asa Gray

I am sorry you cannot
come on Wednesday but look
forward much to seeing you
Professor Asa Gray at dinner
on Thursday 28th at 7.30
Some very nice people are
coming especially for the
pleasure of meeting you both.
I think we had better
put off our visit to Chelsea
it is so hot you have

probably far too many
engagements - It is full
of work -

There are not half
enough hours in the day
for all I want to do

It is very

Marianne North

from Norway - It is the
return of weather in which
it is a pleasure to feel
oneself alive. Rare in
England but more enjoyable
than any where else. When
we get it. inspires me to
write this bold request.

- in the midst of the confusion,
worse compounded of our
Volunteer Camp. So excuse
a hasty scrawl & believe me

Affectly Yours
Amatissand Burr

Tuesday. 1st post July 25th

My dear Miss North

I have been waiting
& waiting, for a letter from
the Layards, who ~~are~~ en-
gaged. to come here next
Saturday & for whom

I am consequently obliged
to reserve rooms. which
if they do not turn up

after all, we should -
too gladly have offered
to your friends Dr & Mrs
Ada Grey. not daring
to do so, lest their destined
inhabitants might suddenly
appear. The return of
lovely summer weather -
however after a spell - of
wind & rain, makes one doubly

regret missing the opportunity
of seeing the distinguished
naturalist, & am bold enough
now to ask whether even
at the eleventh hour, you
could persuade him &
his fray to accompany
you on Saturday by the
3.30. pm train from
Paddington, & excuse
smaller apartments, if
the "best" guest chambers
happen to be appropriated
by the return wanderers

3 Victoria Street S.W.

Tride

Dear Mrs Asa Gray

I find the enclosed on
my table this morning - Mrs. Alfred
Burr said the other day how
much she wished she J^W Burr
could entice you & the Professor
to come & see them at Aldermaston
J^W said why don't you try?
J^W did not think you would
be ceremonious about introducing
if she did - as she is just
leaving England for six months

If you will probably be elsewhere
on her return - her house
is worth going too its surrounded
by some of the finest old
oaks I have seen in the county
at present sheltering the
Camp of Berks - volunteers
under Col. Lord Lyndsey - if
you go down you will
meet him his wife, &
the great Duffs, & Lubbock
possibly the Layards
if they return - I go
tomorrow by 3.30 train
from Paddington Station

I should meet you there -
I've returned on Monday after
the bank holidays - the
note ought to have reached
me last night so perhaps
you had best telegraph
straight to Aldermaston
~~Reading~~ - I hope much
it may be yes - the Hookers
will tell you how agreeable
the place is -

yours very truly
Marianne North

Chauvine North
at Home
Tuesday 12th July
3 by

3 Victoria Street Rd

POST



CARD

THE ADDRESS ONLY TO BE WRITTEN ON THIS SIDE.



Miss Asa Gray
Richmond House
New

A. Norton

My dear Sir

I expect Mr Downing
to dine with me tomorrow. Will
you give us the pleasure of your
company. We dine at 3 o'clock.

Yours truly

Andrew Norton
Sunday eve.

to the Editor

Dear Sir,

I have your letter
of the 10th inst. and am
glad to hear you are
well. I am sure you will
be very glad to hear
and see that the
will present the same
the pleasure of your
the great

with the same

Yours

Monday,
March 16

Shady Side, June 22nd

My dear Sir,

There is a large
old oak on our grounds for which
I have a particular value and
which has been attacked by some
insect or some disease which has
apparently almost destroyed it.
I shall be so sorry to have it
die, if it is possible to save it,
that I venture to ask you to give
me your counsel about it. Will
you come and look at it and tell
me if it is a desperate case?

Excuse my making this demand on
your kindness and your time and
believe me to be with great regard, very
truly yours, Catherine E. Norton.

he has handed me a paper, which I take the liberty of enclosing to you, containing a list of desiderata from the United States. Perhaps the Boston Society may be able to send him some of the articles.

I hope very earnestly that you will hold to your plan of coming to Europe this next spring for I should look forward to meeting you there with great pleasure. I trust that you will write to me some of the general features of your route, that I may arrange so as not to miss you.

With my most respectful remembrances to Mrs Gray, — Believe me

Ever most faithfully yours
Charles Eliot Norton.

Dr Gray.

Calcutta. 20th Octr 1849.

My dear Sir

I have derived so much pleasure and advantage from the letter which you were kind enough to give me to Dr. Falconer that I must thank you for it again even at this distance. I derived it after I had been here a few days and received a most pleasant invitation from Dr Falconer to come and stay with him at the garden. During this last week I have been spending two or three days with him. He is a most agreeable man of some thirty five, and although much occupied in scientific pursuits, and going very little into society he keeps up a warm interest in general affairs, and seems to be universally liked and esteemed. He was much pleased to receive the books which you sent him, and desired me to tell you that he was preparing some plants for you, and that he intended to open com-

munication with you very shortly. I cannot
speak of the garden botanically, but only as
an outside observer. Much as I had heard
of its beauty, it quite surpassed my expec-
tation. It embraces about 300 acres, which
stretch back from the river, the front upon the
stream being considerably more than half a mile.
Unfortunately the river is encroaching upon
it and a beautiful row of trees which now
stand upon the bank, *Acacia*, *Banyan*, and *Sesuvium*
among them, seems likely to be undermined
and carried down the stream in the course
of a year or two. The house itself, which
is on a projection of the bank in a situation
which gives it a delightful view for some
distance up & down the river, is not as Dr
Falconer thinks entirely secure against the en-
croachment of the water; and he has already,
I believe, applied to the Government to have
a vessel sunk near the bank in front of the
house in the hope that it may form a barrier
by collecting the water. The scene in
some parts of the garden is so free from any
of the peculiarities of tropical scenery that

I might almost have imagined myself at Rome,
but go on a few steps farther, and you are
surrounded by all the wood and beautiful
forms of tropical vegetation, from the *Palm*
to the *Banyan*, and from the *peepul* to the
Casuarina. The famous *Banyan* of the garden
reminds one of Milton's description. Dr Falconer
is paying much attention to increasing its
size and during the last eighteen months
has brought down eighty new stems. It already
has a diameter of 200 feet.

Very little seems to be doing generally in India
either for science or literature. The Asiatic
Society has fallen much from the high position
which it formerly held, and appears to be
spending its energies not so much in collecting
what is characteristic of the country, and
what might be of importance as illustrating
her history, her antiquities, and her resources,
as in gathering together from all quarters of
the world crowded and almost useless collections
of natural history. The curator Mr Pleydell
has just cut up a large box of specimens
for the Boston Soc. of N. H. in return for
some shells which were sent by them, and

CE Norton
Shady Hill.
Feb 21. 1870.

My dear Dr. Gray

I am much obliged
to you for sending me a
copy of your very interesting
article on Darwin's book.

It is by far the most satis-
factory analysis I have seen
of his theory. I admire the candor with
which you have written and
the equal delicacy & force with
which you have met the
attack (which was at least
rash and based upon unrecog-
nized assumptions,) lately made

upon Darwin's system.

Your vindication of the theory from the charge of necessarily tending toward atheism seems to me complete.

I regret some expressions in the last chapter of the book, as likely to excite prejudice, and as utterly unsupported by any present knowledge. Mr Darwin seems to me not to have perceived that an argument from analogy cannot be stretched indefinitely. In reasoning from the finite

to the infinite its conclusions are no more than possibilities. In reasoning from the known to the unknown its conclusions become more & more uncertain with each further step, until it becomes in the highest degree improbable that they can be correct.

The test you suggest in regard to sterility of crooked ~~seed~~ is at once practical and ingenious.

With my respects and best regards to Mrs. Gray.

I am, most truly Yours

Charles C. Norton.

Newport. 8th June. 1866.

My dear Doctor Gray

I met with a passage
last night in Lord Bacon's
"Confession of Faith", which
is of such close application
to Darwin's Theory, and so
briefly answers one of the
main objections made to it,
that I venture to copy it
out for you, thinking that
it may be new to you.

He says:

"That notwithstanding God
hath rested and ceased from
creating since the first Sabbath,
yet nevertheless he doth accom-

fulfil his divine will
in all things great & small,
singular and general as fully
and exactly by providence,
as he could by miracle and
new creation, though his working
be not immediate & direct,
but by compars; not violating
Nature, which is his own
law upon the creature."

Bacon's Works. Predding's
Edition. Vol VII. p. 221.

I was glad to hear
from Lowell that you were
going to give him your
articles. I am,

Most truly, Yours
Charles E. Norton.

clude many apparent discords,,
many diverse modes of operation.

Your hits at Owen's obscure
oracles are very fair. It is a
pity that moral cowardice should
lead him to endeavour to conceal
truths of which he is convinced
under phrases of which only the
initiated can perceive the bearing.

I hope you will have time to
write much more on this subject,
is not this just now quite as
much your "proper work" as you
reem it, as anything else?

My Mother & Sisters desire
me to send to Mrs Gray and
yourself their most cordial
regards, and I am, always,

Very sincerely Yours

Charles E. Norton.

Newport. 22nd June. 1860.

My dear Dr Gray

Your kind and pleasant
note reached me some days
before your article in the Atlantic
arrived, - but I have now had
the latter long enough to read it
twice. It seems to me that you
have in this preliminary article
stated the points essential for a
fair understanding of the discussion
concerning Darwin's Theory with
admirable skill & clearness. The
lightness of your tone in portions
of the article serves to give it a
popular character, but can mislead
no one into supposing that the
topics ~~discussed~~ introduced are treated
trivially, or with any intent to look
only superficially at the subject.
The argument on p. 112 for the
purpose of showing that specific

creation may have had a part in the existing condition of races, as well as variation and natural selection, - that the one set of operations or causes does not necessarily exclude the other, appears to me the most important portion of your essay. I wish that you would give it a fuller treatment in a succeeding number. It is plain that neither separate acts of origination, nor the action of all the principles of derivation taken together, will alone explain the facts of organic existence so far at least as they are now, in the present position of science, exposed to view. It does not seem impossible that Darwin's theory, which at first sight appears to do away with specific creation, may lead to an understanding of the laws of origination as well

as of those of development. I do not mean of course to an understanding of their divine, or supernatural, or miraculous causation, but of their occasions, their exhibiting their secondary rules, all that lies this side of their ultimate principle. Why should not we have the theory of Gray as well as of Darwin, - a theory embracing both specific acts of creation and great processes of derivation, and showing the harmony between them?

There is danger lest with the tendency of modern science to simplifications of generalization this very essential principle of ~~simplicity~~ ^{of the Divine} work, this principle of simplicity should be carried so far on its accommodating - it to the feebleness of human conception, as to lead really to enticement, and to cause the fact to be lost sight of, that a single great harmony may en-

Shady Hill. Cambridge.
10th Novr. 1860.

My dear Dr Gray

I thank you heartily
for the kind note with
which you send me notice
of my election into the
Am^r Academy. I am sure
that I shall find interest
in the meetings when you
take part in the discussions.

I am glad to be a mem=
ber chiefly for the reason
that you recall in your
note, - that my Father
was a member before me.
It is a pleasure to me to

be connected thus in
association with him.

I hope to see you
soon, — and I am always,
with true respect,

Faithfully Yours

Charles E. Norton.

tolerably liberal exactness, too they
struck me so much, ^{as coming from him,} that I repeated
them almost as soon as our talk
ended. And as was but natural
from this he went on to ~~express~~ ⁱⁿ ~~his~~ ^{his} ~~own~~ ^{own} ~~words~~ ^{words} ~~the~~ ^{the} ~~fact~~ ^{fact} ~~that~~ ^{that} ~~modern~~ ^{modern} ~~science~~ ^{science} ~~had~~ ^{had} ~~wrought~~ ^{wrought} ~~in~~ ⁱⁿ ~~religious~~ ^{religious} ~~opinion,~~ ^{opinion,} & of the fact that questions
were now ^{in dispute} ~~open~~ which we had been
brought up to consider out of the reach
of discussion. His whole talk left upon
me strongly the conviction that he held
the question of Theism, - as he held so
many, - open.

That he was a devout and religious
man we all know, but one need not
be a ^{dogmatic or philosophic} Theist to be that.

I am, always, most truly Yours
C. E. Norton

Shady Hill, Jan^y 1, 1895.

My dear Dr. Gray

Good wishes & thanks go
well together. I heartily wish
you a happy New Year, - and I
sincerely thank you for the copy
of your Memoir of Jeffries Wyman
that you were so good as to
send me. It is the best tribute to
the man, & the best record of his
work that I have seen; the one
that he himself would (I believe)
have most nearly approved; claiming
nothing for him that he, with all

his modesty, would not have admitted that a friend might claim. He would, perhaps, be likely to say, - "I should not state it so as regards myself, but ~~as regards~~ cannot find fault with another for so stating it."

I believe you assert too strongly that Wyman "was philosophically a convinced Theist". No doubt he was, in his earlier life; but in these late years he seemed to me to hold the question of the existence of a God as an open one. My last talk with him was in May June last. He spoke of his recent studies in Florida, of the evidence of the succession of races

of men on this continent in the prehistoric period, of Darwin and his theories, of the condition of scientific thought in England and this country, of the greater liberality or openness of thought & expression in the old world, - & all these various subjects led up naturally to the one that underlies all speculation, - and for a moment he lost his usual calmness, and with a voice full of emotion he said, - "This struggle for existence everywhere is an awful spectacle, - not one perfect form on earth, every individual, from crystal up to man, imperfect, warped, stunted in the limit." I quote his words with

CE Hodges.
Ashfield, Franklin Co., Mass.
July 15, 1876.

My dear Dr. Gray

You will remember that I asked you, some months ago, to give me, for publication, some notice of Chauncey Wright, with respect, especially, to his paper on *Phyllotaxis*, and his services to the Academy. I am just now writing a notice of him, to be prefixed to the volume of his essays which will, I hope, be published in the autumn. The volume will not contain his

paper on the arrangement of
leaves, and I am, therefore, the
more desirous to have some
account of it, ~~or~~ some state-
ment concerning its character,
in the notice of his life book.

Are you willing to send me
such a notice as I may include,
with your name, in my sketch,
or, if you prefer, will you send
me something that may be
printed as an independent con-
tribution? I want you to do
whatever is easiest and most
agreeable to yourself, and

I hope you will not think
that I am imposing too much
of a task on you in asking
this.

With my best regards and
respects to Mrs. Gray, believe
me, always,

Most sincerely Yours

C. E. Norton.

Thursday eve 2.

My dear Dr. Gray

I am very sorry to
be prevented by an unexpected
engagement at home from
being with you tonight.

With true regret, I am

Believe me truly Yours

C. E. Norton.

Chaplin

Beats and beats for justice in the
house of commons. Specialy Respectfully for
10 Mar. 1846

Now I am very busy with my
writing and not able to write
more -

~~John Garry, the first of the~~

~~the 12th of the year - Sept 17 - 18~~

James C. Smith, the first of the year
1846 - 1847

1846 - 1847
1846 - 1847

1846 - 1847

1846 - 1847
1846 - 1847

1846 - 1847

I have not seen by sliding, but in 1846
at the first of the year - or the first of the
it was the first of the year - Feb 23 - 18

2nd of the year

1846 - 1847

1846 - 1847

1846 - 1847

1846 - 1847

1846 - 1847

1846 - 1847

1846 - 1847

1846 - 1847

1846 - 1847

1846 - 1847

you were not as well as she
could wish. I hope you will
now get a vacation.

I was very much obliged to
you for your compliance with
my request ^{for an estimate} ~~to send me~~ of
Wright's paper on Phyllotaxis.
I trust it has not given you much
trouble, or will not do so.

Always most sincerely Yours

C. E. Norton.

^{C. E. Norton}
Ashfield, August 7, 1876.

My dear Dr. Gray

I hoped to get to the
Botanic Garden last week that
I might thank you in person
for the copy of your new volume
which you were so kind as to
send me, and which it gave me
real pleasure to receive. I am
glad that you have thus collected
your "Darwiniana", for your papers
will always have a historic
interest, in addition to their

intrinsic importance, as having been the chief contribution made in America, on the part of science, to the discussion of the principles and propositions of Darwinism, and to the correct popularization of its main doctrines.

I have not yet read the new portion of the volume, for I am reading the old part from the beginning; but my eye had caught several passages of peculiar interest to me, from

the fact that they show how satisfactory the general propositions of Darwinism may be to thinkers of the most remote schools, as I compare your point of view with that of Chauncey Wright, the proof of whose Darwinian articles I am just now ~~correcting~~ revising.

I had the rare good fortune of meeting Mrs. Gray one day near the Square in Cambridge. I was sorry to hear from ^{her} you that

Cambridge. May 16, 1877.

My dear Dr. Gray

I must thank you,
for my Mother & my sister
Grace as well as for myself,
for your note. Such an expression
of affectionate sympathy is
very welcome even in the midst
of sorrow.

My Mother. I am thankful
to say, is not broken down by
this heavy blow; my sister
Grace is steady under it.

But it is a great trial of

their fortitude & health.

With affectionate regards to
Mrs. Gray & yourself from
me all, I am

Gratefully & affectionately

Yours

Charles E. Norton.

essay on Heredity, - monuments of
the adamantine impenetrability of the
lonely fortress of his understanding,
and of its inaccessibility even by the
improved implements of modern scientific
warfare. He closed the gates forty or
fifty years ago, and not even a postman
has been opened since.

The Saturday club held its meeting
yesterday, and chose Theodore Lyman
as a member. Mr. Emerson was present
for the first time this year, but it
would perhaps have been better that
he had not come, for while all his old
sweetness remains, and while for the
moment his interest in thoughts and
things is fresh, his memory fails to grasp
even passing incidents, and in half an
hour he cannot recall what has passed.
He is more or less conscious of his own
disability, and his condition touches one's

Cambridge. February 27, 1881.

My dear Dr. Gray

I should have written
to you long ago, first, to thank
you for all your
kindness to Lily, which I now do
most warmly; and second, to
thank you for your pleasant
telephone letter, - had it not
been, for the last six months,
been obliged to avoid letter-
writing ~~and~~ as well as working
of a severe sort. I am gradually
getting over the obstinate sleepless-
ness that disabled me, and am
glad that I can now tell you
that I have been neither ungrateful

to you, nor unkindful of you.

I hope that everything continues to go pleasantly with you, and that your journey in Italy will be not less interesting than your visit to Spain. Here, shut up as we still are in the depths of winter, with not a sign of spring but the lengthening of the days, and with only the usual mild snow-covered varieties of Cambridge life, one might well envy your Italian days. A little green-house cyclamen on my table reminds me of the February cyclamen crocuses in the Rorghese gardens, and of the primroses under Florentine olive trees. I do not share Lowell's preference for the banks of the Charles to those of the Arno or

the Tiber.

We have missed you greatly at the meetings of the Scientific Club. Our central warmth and light seemed gone. We chose Townbridge into the club two or three months ago. Our meeting last Thursday was at his house, when he gave us a discourse on the effect of cold upon magnetism. It was very appropriate to the night, with the thermometer at 10° above zero, and half a foot of snow on the ground. Bowen, though he seems better than he was last year, has given up the Club altogether, and Mr. Paine is now often absent. Bowen, by the way, has lately published a volume of selected essays, which need you to review it. It contains his paper on Instinct, and his famous Academic

Cambridge, 24 Nov. 1884.

My dear Dr. Gray

Absence from home
has delayed my thanks to
you for the copy of your
most interesting address on
the Characteristics of the
North American Flora which,
with your unfailing kindness,
you have sent to me.

The address makes the
little warning in your note

less impressive than it
might have been. The spirit
of youth remains, united with
the wide view and large re-
sources of well-spent years.
I count this address then
as but the first of a new
series, - and, I trust, of a
long one.

Always cordially & sincerely

Yours

C. E. Norton.

C E Easton

Thurs. Morn. 12 Nov. 1886.

My dear Dr. Gray, -

I am very sorry
not to meet the Lady at
your house next Wednesday.

I find that evening amuse-
ments are apt to make
me sleepless, and as sleep-
lessness is my great enemy,
I have come reluctantly to
the conclusion to resign from

The Club.

Will you kindly forward
my recognition, together with
the expression of my great
regret at being compelled to
give up a pleasure which
I value so highly as that
of the meetings with you
and the other members of
the Club.

Always most truly Yours

C. L. Norton.

My dear Dr. Gray -
Your poems
are most beautiful. & your
note touches my very heart.
Such kind words are a
"blessing" indeed. & it is
most kind to be fifty to
have such friends. I thank
you & Mrs. Gray over &
over again. I am most truly
& gratefully your affectionate -
Grace Norton.

My dear Dr. Gray -
My hope of
getting to The Garden today
had been disappointed by
the weather, & I cannot
longer delay thanking you
for your kindness for sending
me your two papers. The
one about the naturalists
whose names even were
unknown to me, had the

now willing to all to write it. - And today
I am very glad "you were good enough to
bestow a copy on me. is treasured brown -
feeling so very. - And now you are going
to learn the truth of the handwriting above
Givest me the beyond: for the next time I see
you I am going to ask you for - what I
have long wanted - your photograph. I don't know

interest which any account
of good & true men must
have, beside the interest of
your authorship. But the
paper on Mr. Agallie was
of this deeper interest to me
in many ways; & I read it
feeling not only my own
pleasure in it but the
pleasure it must give
Mrs. Agallie. She & I have
just been reading a week
together at Newport, &

can never be with her closely without feeling
how much of her life is witnessed in her
husband's memory. But the same time with
what large consolation she reports his scientific
position & reputation. Her husband's name
done not to trouble by the tone of your
article. While her intellectual justice will
acknowledge its truth. I am very glad you

whether I ought to write it
at all - in a timid whisper.
very modestly - or thus, with
conceited loudness. Your

Photograph!

Either way, it is humbly,
but affectionately, that I
demand it - or shall demand
it. You will have at least
three days to make ready
your reply, for tomorrow
& Wednesday & Thursday I
have imperative engagements;
but by the end of the week.

I shall appear, - I hope: -
if the "cold wave" I hear is
approaching, can it be
colder than this? / does not
actually drown me. —

Meantime will you give
my love to Mrs. Gray - &
yourself. I believe me to be
always affectionately & gratefully

Yours
Grace Norton.

Grandson.

My dear Friend -

Thank you

again very much about
Clover = Honeydew - , ergo
= Honey Suckle: - which, still.

I can't feel quite secure about
[and you don't say you know]
because the honey is not [and
we both "know" in the
statutes of the Clover, & popu-
lar names are generally true -
are they not? - I hoped

This is certainly at the best a singular conception.
And it seems to me that Shakespeare - at the
moment he was in his thoughts so much the
direct effects of occasions ^{causing} as principally some
peculiar quality of formation ^{or allusions} which he
believed to belong to the person; therefore I still
is there any such condition in the preparation
of it (which he could have known of) - or is
there an allusion to the medicinal belief of the poem
of all sweet persons to whiten the teeth into whiteness ^{are honey?}

you might tell me of some
other flower with horned
stalks - like *Sagittaria*.

As long as you with such
incentious liberality of kindness
answer my questions they
will be endless!! But my
today's enquiry is perhaps
rather for a chemist than
a botanist; but I write address-
ing to you under your title
of Doctor - which, in its
original meaning, belongs to
you in so many departments!

I must profess my question with a long protest
from ²⁰Henry IV. (P. 41). The King says to Prince Henry,
"Shoe thou shalt prove a doctor, withy friends
A hoop of gold to frame thy bottom in,
Shall the unlesse weel of thine leave."

(Tringled with venom of suggestion,
As from a free, the ear-rings from it in-
shall never leave, though it seems as though
As according to such grandfather."

Then, was it any vessel but
a goblet of Venetian glass
which could be so shattered?
- which would make the
"barrel" comparison again
very queer. —

I write not only for love of
information, - but for love of
you. because I am so sorry
you are "till a miserable
soul" (how?). But if you
have any "returning spine"
in you, you are better off
than some of us!! I have

- or considerable. little of the - braving in
any Edinburgh that horrified me! —
I am being greatly attached to the fact
of the well I considered knowing it well : —
I think I shall never the fact - of seeing
them again : —
But the but "I hope it will be me!!"

been a considerable deal too!
or I should have been at
the Garden & its house before
now. But young people of 50
can't expect to have the vigour
of their elders! (My semi-
centennial birthday is on
Monday! I feel as if it
were my centennial!!)

But an error! and
affectionately yours
Grace Norton.

Saturday.

P.S. - Stop just now for a moment
to 'brevity': I want to tell him the story
with brevity, but ~~not~~ interference - "to the
brevity, i.e. the small householder, with pretty
interior the pretty fingers of the elm, & so on
the female very young, the same fingers." He
said, however, that in some countries by brevity
or brevity - it would be generally understood the
story - but it was the picture of homogeneity

P. P. S.

I find in Johnson's
Dictionary "Aconite" defined
as "Poppo", the herb wolfsbane,
but commonly used in
poetical language for poison
in general. — This might
be inferred from the passage
I have quoted: but scarcely
alters my question; — but
I will put them in another
form. From what arose the
medicinal belief? Is there
any natural or real process
which would suggest it? —

Friday.

My dear Dr. Gray -
I thank you
very warmly for your
helpful though not decisive
note. Since writing to you
I have come across another
note of Aldis Wright in
which he says. "In Lytle's
Herbals is a chapter III. 37
'Of Woodbine or ~~Hamisuckle~~'

It may be that Shakespeare used it sometimes
before Plautus sometimes for another: but I am
coming rather to the end that the reading
of the passage shows he - not the one I suspected
yet - but one suggested by that. "So with the ^{extrinsic} ~~reading~~
[that is] the direct sense, such as 'will itself show'
This reading he justifies if what Stearns says be
true that "in some countries distinctions" by
'herbals' would be generally understood the way

& it is said 'This herbe or
kind of Bindweed is called
x x x in English Honewuckle
or Woodbine'. & of some
Caprifolia.' So also in Gerard
the woodbine & honeysuckle
are identified, & bindweed
is a different plant."

Certainly all this is
confusing! - I omitted a
part of the note I quoted
to you before, thinking it
unimportant. but you know -

And you into the question & much that
this may have been the "London thought"
that 'woodbine' was the plant, & 'honeysuckle'
the flower, & the same distinction is apparently
made in Plinys Aelian. Woodbine that
beareth the Honewuckle! And this tells you
perhaps perhaps only indicates that 'woodbine'
was a name for many climbing plants, one of
which was the honeysuckle. -

For, nothing to make like
of the ^{Shakespeare} ~~to~~ might be
led to define the Woodline.
And when one comes to think
of it, "the sweet honey-suckle"
is not exactly what the
"black, smooth head" and
the "fair, large ears" of
Bottom would have suggested
even to Titania; how does
it quite correspond with "the
barbing fingers of the elm"

But I only less delicate
this reading than Steevens's

This point of difficulty seems to be precisely
parallel - is it not? - by Antonio confusion
about Shelton and Volantini.

or them thinking that
the help ^{from} ~~from~~ ~~these~~
wordline for consolation.

I don't quite follow the
paragraph in your note
where you say "The Elder
Birdweed is no doubt the
real thing." In what sense
do you call it "the real thing"?
It would not seem to be
Shakespeare's "thing" if it
does not rise above ordinary
needs", while the larger one
overruns shrubs.

Thanking you over & over again for your
intell^l & patience, I am

Very affectionately, your
O
Frederick Norton.

If you do not, then note on that or
anything is intell^l, at your disposal in any way.
The quotation from your London, let me say,
come to me through Alice's hands. - (over)

My dear Dr. Gray -
Have you ever
given attention to the lines
in *Madammen Heights* (IV. 1.)
"To doth the woodbine
the sweet honeyuckle
Gently entwine: the female ivy,
Enwrings the barking fingers of the
male."
What do you believe Shakespeare
meant by "the woodbine"?
The English editor of Shakespeare

in Ben Jonson's *Potion of Delight*: "But
from the blue birdness with steep upfold
white honeyuckle?"

The word "woodbine" occurs in only two other
places in Shakespeare: *As You Like It* (II. 1.) where he calls it "hudson"
the bark "quite very sonorous with bearding woodbine" & the
"woodbine" which seems like honeyuckle. *Bottom*
the woodbine: 9 in French also about *Bottom*,
III. 1. where

Sam. Aldis Wright, says
"H¹ or speaking 'woodbine'
& 'honeydew' are the same.
& in consequence various readings
& modes of punctuating this
passage have been proposed.
x x x [Text] as a matter of
fact 'woodbine' is to this day
used in Suffolk to denote the
large white convolvulus."
He adds "Mr. R. G. White
finds no difficulty, because in
America what are called the
woodbine & honeydew are

commonly found bearing some such others: but
it appeared from his description that he called
honeydew what we call honeydew. & that
the honeydew of America is the hemp
honeydew which is not indigenous in this
country. Great unknown in the hemp
'woodbine' is distinguished with 'convolvulus',
is convolvulus 'eg', now with 'honeydew'.
from, in that case there is a very small difference.

"the bleached bower,
Where honeysuckles, ripened by
the sun,
Forbidden the sun to enter"
is afterwards spoken of as
"the woodbine coverture."

These instances have induced
Steevens to interpret the
poetical passage in this way:
"So the woodbine, i.e. the
sweet honeysuckle, doth
gently entwine the bower,
fingers of the sun, & so
the female ivy winding the
same fingers." But I

shall soon read the passage
again if I must read it in
that way, !! - so can't you
give me light upon it? -

Don't take the trouble
to answer this note in
writing; I forgive me for
giving you the trouble of
reading it. I hope to see
you on Mrs. Gray soon, &
if you will kindly leave
with her a message of
information on this point,
it is all I ask for.

With my love to her, I am

affectionately yours

John Norton.

London

Monday.

My dear Dr. Gray -
You are "too

good" - if I may say so in
the most respectful manner -
I thank you doubly for
this second note. I keep
"under the weather" just
long enough to read that
(third) note from me. - for
I should not venture to stretch
it beyond mere thanks. Except
to a kindly consolation.

of course. "Are they right?"

I am very certain of your case. I hope
you are really better. But every one ought to
be ill in such weather - if only as a sort of
humane protest against it! "Are not things"
the things that grow - that grow gray?
You know that joke? "When flowers grow gray"
hail they be so ill? "By this color"
Always your affectionate Grace Norton.

But I do want to say that
I did not make myself clear
if you think I "objct" to
'woodbine' being 'convoluted'.
I will not make a question
of it if you say so: What
I violently "objct" to is
Stevens' making the 'woodbine'
(whether it is trine round
"the barkey fingers of the elm"!)

But - how about the
"luscious woodbine" ?! of
Act I. Scene I. line 257 -

Now here I am coming at you with
another question: - (but again one that can
beid indefinitely for an answer. So how "that"
beid as a name for clown. In Stevens
Andronicus (IV. 2. 90) - that small unmeasurable
of "clown"! - it speaks of
"small more sweet, & yet more dangerous
than bait's wolfish, or honey. Wells to clown."
The commentators say that is a very small word

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INDIANA

State University,

BLOOMINGTON, IND.,

April 2^d 1874.

Prof. Asa Gray, LL. D.

Dear Sir,

The Faculty
 of Indiana State University
 have selected you to deliver
 an address at the dedication
 of the New Building now
 about completed. The dedi-
 cation will take place on
 the 1st day of July next.
 This new building is
 devoted to the Departments
 of Law and Science.

It contains the celebrated
Owen & Ward Cabinets, and
a Museum of Natural
History. We sincerely hope
that you will be able
to accept this invitation
and be with us upon
that occasion. All expenses
will be paid, at least,
and something more.

Please let me hear
from ^{you} at once.

Very truly and
with great respect,
Yours.

C. Nutt, Pres't.

Philad. March 27th 1841.

Dear Sir,

I send you by Harnden's Express a bundle containing a set of Composite for Hooker containing 118 specimens, and 601 specimens of various orders for Mr. Casey, wh. I hope will prove satisfactory to him. At any rate they have cost me a good deal of money, much time, and considerable risk in the procuring, for wh. what I get for specimens is not like to remunerate me. The expense of conveying things ^{over land, the whole distance of the continent, & then shipping them round Cape Horn} is a very different affair to the making of collections elsewhere. If a hint of New England run wh. costs 12 cents, has to be charged? 3 dollars. ^{in the mountains} Some idea may be formed of the value of other things draffed on horseback over double such a route.

As to *Reimer* I have now no ~~more~~ ^{other} general
collection of duplicates. Of some things I have
a few many but of many more not a vestige
remains to spare.

I am sorry that your letter came to
hand after my paper was printed off and thus
remains no opportunity of making the acknow-
ledgment you required.

As to *Coethrogyna* I had made the remark
that it appeared to be nearly that form, ^{had} exactly
the habit but no paler in the receptacle. I see
the same thing is also persisted in by *Eulicher*
If there is really such a plant with pale bristles,
(as they are particularly described by *Eulicher* as *obov.*)
much as our plant resembles it is still probably
not the same.

As some things in my manuscripts have not
been published, will you oblige me by sending
my manuscripts with the *Scaderngs* collection when
you send them.

As to *Lindley's* plant *Diplophyllum* in *canon*
of which nothing can be told by the miserable painted figure
in Bot. Rey.) I must say, that I have seen nothing
else in California. As at all approaches it is
the *Coethrogyna*, which is everywhere a common
plant there; if not the same it is another of
those pushing isomorphes which seem to abound
in that quarter.

Yours truly

J. S. Nuttall

Paid.

Doctor Wm Gray.

Spencer. Torrey's

Mac Douglas Street

New York

[Handwritten signature]

(18.)

Polygala alba. Obs. 4. Leaves narrow linear, stems several
from the same root simple. The root bitter & branching similar
to the Seneca Snake root

Polygala *Californica, 4. ^{without a crest.} somewhat pubescent, decumbent, leaves
elliptic-oblong, obtuse pinnate; racemes small few flowered, leaves
greenish, calyxine unispermous oblong obtuse, fertile flowers axillary, all
upon the radical sarments, apetalous.

Allied somewhat to *P. sibirica*, but the flowers
without a crest, also to *P. Seneca* in the foliage & in the size
& bitterness of its roots. Capsules almost circular & flat

60
e 100

Phil^{ca} April. 7th 1841

Dear Sir

I am much obliged to you for forwarding Mr. Carey's letter & the draft on Contharagum. I would remark, that Mr. Gray assured me one of the species I had collected in California was the plant intended by Decandolle in his prodromus, otherwise (in the absence of a specimen) I should greatly doubt their identity. I had made the remark concerning this plant, of which I had been obliged to form a distinct genus) that it appeared wholly to agree in habit & nearly in character with *Contharagum*, but that the receptacle was certainly without paleae. May there not still be a species of this genus, with a palmarium receptacle as described by Decandolle and compared by Endlicher?

The specimen you called *Cosmosiphium* I found amongst the *Cosmopiles* (when Hooker had placed it,) in the Acad. Herb^m. you did not there mention it as a section of *Cosmos*.

It is not now worth the while to enter into any explanation about the names I had given, as what you have certainly not adopted, or else I might ask you what had become of *Unicarpus*, which I had described on the spot in deference to what Hooker had signed as a *Hemclera*, for this genus you have given another name.

Picking up and myself assured you that the Umbelliferous plant of N. Carol. that you had taken to be *Peucedanum tenatum* was not our plant but a distinct genus. One fact from the old printed says seems another, but what did you do with *Liposticum* --- from California made without a word the genus *Decega*. What was done with my section

Trichomena of *Penstemon*. (marking but a section this) transferred to *Gayophytum* with which by the bye I don't believe they ~~agree~~ agree. This ~~is~~ ^a ~~another~~ ^{found} genus of this evening. *Taraxacum* (I write from memory), is left with *Penstemon*, but I shall quote no more ridiculous examples of what there are plenty more, but let the thing remain as in possibility!

Thus, I do this yet, in consideration of what I had done, not in the closet but in the field, entitled to expect the same privilege of consulting ~~you~~ Dr. Gray's Herb^m. that you have of consulting the Herb. of the Academy. As it is now determined, I find, that I

shall be obliged to work in the dark, as somebody will then come after and
note up my unnumbered errors & mistakes as a beacon on which to establish
something de novo.

For resubstituting many of my manuscript names (given in great haste
in the mechanism of the Academy) I certainly have no occasion to thank you
in regard to the names of things recently introduced into that collection from the West.
They cannot be taken at all as the names I shall ultimately employ
& therefore the quelling of them is to me an essential injury, as it tends
to create confusion & error.

Yours, respectfully

J. Nuttall



Mr. Anna Gray

Professor Joseph MacDougal Hunt.

New York

Draw of reply to annexed letter
Thos. Nuttall, New York, April 14, 1841. Sent April 16.
Dear Sir

Your letter of the 7th inst (post marked 12th ^{which} reached me this evening, somewhat surprised me, and I proceed at once to reply:
1st That neither here nor in your former letter do you mention Bohlandia, era, which I mentioned as the chief thing in which I felt aggrieved.
2. That you mention nothing of the names Aster, filaginifolius &c, which you only could have derived from me. 3. ~~You want to see Candolle's~~ plant certainly bears chaff mixed with the flowers as described by de Candolle, and so I told you at Philada. so that you can tell if you choose consider the other spec. as a distinct genus. I have not misled you as to ^{the} facts, and you can form what conclusions you like. Lab is quite correct except that he does not notice the almost no pappus of the ray. Except in wanting the ~~not~~ chaff I see no difference your C. incana and C. C. Californica; but it may very probably be a diff. species, as you suggest. Now if you wish to consider ~~your spec. as~~ the spaleaceous spec. as a distinct genus, please say so, propose your name and I will make the remark as you shall direct.

Cosmidium was shown to you as a doubtful ~~spec. sect.~~ subgenus of Cosmos (not Coeoprus); but either way, who ever took a subgenus of yours, adopted the name, and called it his own genus? How did you know that the Biddens gracilis, Torr. belonged to it? a plant you now saw. - because I told you so! (You have yourself afforded the answer) I shall now reply seriatim, but very briefly to the main allegations of your singular letter.

Your Urocarpus, or, Tolmiea, was designated by me as a genus before I saw your mos. The plant is neither of your discovery nor mine. Why, in publishing a work at our expense, should we vol- ways yield our genera, formed before we knew of yours, to you, when we describe plants not collected by you, and which we had before you want to Oregon?

"Picking & myself assumed you that the Umb. ph. of N. Carol. that you had taken to be Peucedanum tematum was not our plant, but a distinct genus." What then? Do you complain that we did not give you credit for the information? That you have done in full. Had you given the genus a name we should have adopted it as if it were correct, which we have now good reason to believe it is not. If you could not see that your Ligusticum was no Ligusticum, when the necessity that we should stop the printer, then upon our heels, and write to you at Boston to correct your oversight. Would you have done it? Cassat Judaea Spelt! Your allusion to Laysphyllum is unfortunate. We have not transferred your Trichomeria from a section of Andros to one of Laysphyllum, as you erroneously state; but your plants

are veritable Gay's Myrtum, and fall into all our sections. Do you complain because we do not make you call them species of Gay's Myrtum, when in your very letter you say that you do not believe they are so?

Taraxia. Do we not say that you consider it a genus, and quote your names ^{accordingly} ~~correctly~~, so that whoever adopts your view, will be obliged to adopt your names? What would you have? Should we ~~revoke~~ ~~cancel~~ ~~displace~~ it as a genus because you thought it so? On the same principle we should have adopted all of Spach's genera! Or do you complain that we did not call them your Ruthnia? as well as your Taraxia's? Why that would have weakened the claim of your genus, and misrepresented your opinions, else we should have done so, as we did indeed with Chylisma because you proposed it either as a S of R, or as a genus, being doubtful or indifferent, yourself.

You say there are plenty more such "invidious examples". ~~If there are a thousand more of the same kind~~ I should like to let an unprejudiced person say whether you have suffered the slightest injustice at our hands. We often differ in opinion about genera & species, and I was glad (I told you so) when you commenced to publish by yourself, that we might both be untrammelled. But did I not fully afford you what knowledge I possessed, so far as came in your way, about Compositae? If I had been disposed to see you make blunders, for the pleasure of correcting them myself, as you seem to insinuate (although I ~~think~~ you do not mean to be understood thus), should I have informed you of preoccupied names (which had gone to the printer (such as Calotheca &c.) and of ~~genera you~~ old genera you were about to describe as new, such as Leptogyne, Coethogyne, Agonista, a part of Bahia (which you called Colpoda) and a half a dozen others, to say nothing of Barandiera (which I had counted it a pity to make out) of which you had collected none in your western journey, and which you said you never should have taken for that genus! You cannot say that you were not treated in a manner in the highest degree honorable and ~~is~~ ^{ingenious}. And having been shown the genus all walked out in my manuscript, and saved the mortification of publishing a new genus already published, you surely are not prepared to say that it was ^{disgracefully} ~~an honorable deed~~. To require this kindness by taking to yourself the little credit

which was due to my own labors, and even of travelling far out of the record to introduce Georgia & Florida species, which you had seen described in my manuscript. ~~In regard to Coethogyne you shall have all the benefit of your plea. In this matter, since you decline to place it on the ground of inadvertent omission, if you choose not to repair this gross injustice, you will have no ground to complain if I set the matter right, even although it will not redound to your credit.~~

As to your concluding remarks I have only to say that neither Dr. Torrey nor myself have ever refused you the privilege of consulting freely our collections, nor have we had the intention of so doing. On the contrary they have always been at your service. The insinuation that somebody wishes to blight you to walk in the dark, and thereby form a reputation for science by holding up your errors, ~~is as unbecoming a gentleman as it is untrue.~~ ^{unavoidable} ~~meaner~~ ^{of intention for us as untruths as it is unworthy of you.} ~~meaner~~ ^{meaner} ~~you had best not draw it.~~

You say you have no occasion to thank me for respecting your (Mrs.) names. Certainly not. I do not expect thanks for doing that which is ~~not~~ ^{only} not only mere justice, but is required by the courtesy of science. No botanist, living or dead, has reason to complain of me in this matter. Have Dr. Baldwin's manuscript names ~~(to go on for them)~~ been equally respected by all botanists? Do you remember a genus called Petalanthura in Dr. Torrey's herbarium? ~~Let the galled jade wince &c.~~

A little reflection will I think convince you that you have placed yourself in a false position. I afforded you the opportunity of getting out of the difficulty in an honorable way: I still afford it; and whatever you may do, or refrain from doing, I trust that self respect and a sense of right will always prevent me from doing you the slightest injustice. I remain then for Yours respectfully J. Gray

But to have done with this, which it gives me no pleasure to shade it.

Dear Sir And June 23^d. Philad. April 23. 1841

In regard to Polandiana, I say that without other means of comparison, I did not suspect that it was the same genus with my Silphistrum, made out before I ever saw your Mss. ^{and this ought to have been noticed in my paper} for, in examining my very singular looking Silphium subacule (collected as you will know by me in Florida) I found the achenia to be without margin. I then naturally enough examined the other cognate series, and found them accordingly — not ^{not a line was altered} after seeing or hearing your manuscript certainly without my aid from your Mss. I did not travel out of the wood, merely examined the Silphium for a congener with my S. subacule.

Philad. April 23^d 1841

Then, again, my old Arkansa plant collected as you will know in 1819
22 years ago. with the aspect of a Polygonum & some of the characters of a Por-
-thium, was also reported & named, & mentioned as a distinct form
from its prot. & was by me. — This I gave up, at once, to Mr. Gray —
— it was his Spilanthes, & a very observing botanist.
— that Aster pilaginifolius was a suggestion of

I am not aware that Stenolopodium was a suggestion of
at the same time I have at the same time Stenolopodium to Stenolopodium. I read it over together, I read
yours, — it was recorded in Beechey's Voyages Suppl. I read it over together, I read
my own judgment on the occasion. It was self-evident from the peculiar description. I
:likened it to Stenolopodium but something like Stenolopodium was there described. I
now, however, more than suspect that I have put one species, that is that
may it. one of them is Stenolopodium and the other the same perfect plant
the perfect plant being Stenolopodium I am sure to Lindley's Stenolopodium
and I am told of the same genus, for that the more perfect is a head one.
allowing for variation in cultivation it may be the same. — You mean
say, that Stenolopodium has a bracteolate receptacle. I certainly never understood
you to say so before. you might have known so, but you never said so
in my hearing. — I therefore now perceive (where two later, what I had suspected
that my genus Heterostegium is a good distinct one. I ought not to have
seen when I did, also it appears to be almost synonymous with Stenolopodium
Your Cosmopolitan, I had described as a genus under another name,
— this was done in my Stenolopodium plants. It is true, that you told me
to have mentioned

Bidens gracilis belongs to it, which I have not seen.
You ought to have kept my Trichomeria where you found them.
The only section which nearly approaches Gayophytum is the last with subsessile fls.
& numerous seeds. My Trichomeria is still either a distinct ^{in part} genus, or ² sections
of Penstemon. — They are both, however, variant sections of Penstemon, taking
in the whole range & connection of this vast genus. — Taraxia is far more dis-
tinct; but it was not proposed by Hooker! nor it could it be worked out
to be made a new genus. You do me great injustice in comparing this
genus with spikes & rosettes, varieties, I am not done, & thoroughly done.
~~as I have been at work on it for years~~

If I had been found, (as on a former occasion) with a view of Douglas's collections were in Dr. Torrey's herbarium, I should of course have known Leptogyne is Conthosperma (both of wh. I had, suspected as it may), as to Afanator I have said nothing about; it is here only a minute scrap of alk. The Barbours (a peculiar Californian Sp.) the proppus scales alternately shorter (Colpodia) dense to be distinguished in some way. That not, however, finally settled any of these things, but I say again: a more inspection of Doug's plants, wh. I could see at once in Laurel would have quickly given me all the information I needed. At the same time, I thank

you for ~~the~~ your assistance in this absence
of my ferns *Conradia*. I observed, that Dr. Torrey remarks, & I have no doubt
truly, that he had called it in his herbarium *Macranthera*. But Pickering, who saw me
engaged in describing this neglected plant, & in my absence superintended the publication
as the supervising as well as myself, was not aware that any name had been
given to it by Dr. Torrey or any one else, & so you can enquire of him when he
returns, w^h I hope he will in health & prosperity

On the other hand. - I will now remark - that Dr. T.'s *Amphi-anthus*, (a better name
of 1837.) was, in 1830 given to me by Leavenworth with a hint that he should wish
it called *Leavenworthia*, & w^h I so named in my own collection. Not that I
find any fault with Dr. T. on this occasion, at all, but merely to show that it
will not do to charge botanists with apparent plagiarism & substitution of
each others names from the difficulty of coming at them previous to real publi-
cation. & I hope therefore under *Macranthera* that Dr. T. will in all justice
do away the unpleasant impression w^h his present statement suggests

I now come to a most grave insinuation or charge w^h you have made
against me. It is an enquiry whether I ever saw a fern in Dr. Torrey's Her-
barium called *Petalanthura*! To this I answer, as before the last tribunal, that
I certainly never did!!! I never saw the name in any other than my own or
the Academy's collection & received from Dr. T. the specimen, I had without
any attempt at a name of any kind & some after he had received the speci-
mens from Dr. James. The name is an appropriate one & must have
been arrived at independently of each other. - You have harbored against me
this unjust & injurious, suspicion probably for many years. ^{as well as false} at last it
has come out. I am obliged to you for the disclosure at last!

Happening to take up Elliman's Journal, on page 229. I find you have quoted Rafinesque as
to his disposal of the genus *Monotropa* into two, &c., of w^h (the 2 ferns of Lin.) he proposes to
form a Nat. order, or tribe, &c. "monotropaeus". You then exultingly go out of your way to add
"Here we have the order, or suborder *Monotropaeae* indicates 10 years before its publication by
Nuttall!" I look upon this assertion, as fixing on me the charge of plagiarism. - but to the
best of my knowledge. I never saw this remark of Raf. before! - Now, to do me justice
Does the order, as I proposed, stand on a single fern, but on 3 or 4, or I should certainly
never have thought of proposing it. At the same time, had I known it, I should have quoted
Rafinesque to justify my innovation. This you ought to satisfy, if not, I shall. It is un-
generous & injurious in you to publish this assertion without first enquiring of me. You do
not yourself know the half of Raf. multiparians publications, & why charge any
one with the neglect of what they never saw.

You appear also in that notice, (pretending to be a sketch of the
life of the man) to give an undue importance to a mere string of ^{almost} empty names
in the early part of his career, which you sweep aside his later names like so many
cushions. Yet I think his intellect was as aberrant then as at any other period judging
from his system of botany w^h he brought with him from Sicily. His Indian name of
Hickory, has been long used by the inhabitants generally, than by Rafinesque, but there
is nothing so very sacred in an uncorrected Indian name, unaccompanied by any des-
cription that it should be exclusively adopted by botanists. for at this rate it would be
necessary to alter *Nyssa* with *Tupelo*, *Myrica* with *Toola* (Greek) &c. &c. the above
= city of w^h is too obvious, to require any further remark
In his *Flora Telluriana*, however. Part III. p. 75. (1836.) you will find an
(anticipatory) description of your *Tolmiea*, under the sufficiently euphonious name of *Leptotis*

Menziesii, for w^h he quotes also *Heuchera Menziesii*. tab. 80. of Hooker, in
name ought therefore to be adopted, & you may if you like give me the credit
of pointing it out. Your *Echinocystis* is also described by him, as exactly as he generally
describes

You also go out of your way, I think, to speak of Dr. Baldwin's 1000. names
where good, like other mere names, they have been mostly adopted, but like any other names,
lists of names or catalogues, the degree of uncertainty attending upon them, & the possibility that
the author himself, might, as we often do, alter such names as circumstances require
renders them no further binding than as they are appropriate & convenient. Pursh did
not adopt my names given in *Fraser's Catalogue*, altho' accompanied by the living
objects themselves, & to show the uncertainty, even here, of such names your own
remarks about *Amorpha nana* (Nutt.) are all wrong from beginning to end

I forgot to mention in my last, that I do not wish to be held up
as a bookster to Sir W^m. J. Hooker, & I therefore wish you to send him the *Rein-*
mens in *Compositae* I sent you, as a present from myself.

~~From circumstances, over w^h I have no control, I am obliged to use
the abstract economy to live. I have sold every thing I am able, to keep
out of debt, & I therefore, this reluctantly, desire Dr. Torrey, to return
me the good plants sent to him, as having given ^{away} me sold. (I
the Academy of Nat. Science.) it is as much as I owe to a country
that never patronized or assisted me in any thing. & to approve w^h
I have sacrificed much property & nearly my whole life. On returning
these with my manuscripts, I wish, if desired, to have back 3 or 4 or 5
numbers of your *Flora* for w^h I have now no further use.~~

Yours. very respectfully.

Thos. Nuttall.

If I have used any harsh or improper expressions, I hope you will excuse
them, & attribute them to an undue excitement.

I am going to Washington in about 10 days & shall be there one or 2 months
so that any thing to me had best be sent to the care of G. W. Carpenter, Duffett
Market Street who will take charge for me.

Dr. 1837. having
"not" must have found
the history forming a
"must" name. "Compositae" by and by



Handwritten signature or initials.

Mr. Asa Gray.

Professor

Jones's

MacDougal. Secret

New York



Copied from answer to letter of April 23.
New York, June 4. 1841.

Dear Sir

Your letter of April 23^d has remained unanswered for some time, there being only one point in it which seemed to require further remark. It is your remark on a passage in my notice of Rafinesque, commencing "You then exultingly go out of your way &c." To this I have only to say that 1. I had not the remotest intention of thought of charging you with any such thing, and never even supposed you knew anything of what Rafinesque's note. The greatest botanist living had also struck upon it after 1808 (I suppose) and before 1818, doubtless also without knowing of Rafinesque's Remark. 2. It appears to me that there is nothing in the paragraph nor any where else which would convey the idea of such a charge or insinuation. It is the mere statement of a fact which came necessarily in my way, viz: that this separation had been proposed by Raf. 10 years before you had proposed the tribe; whether on good or bad grounds I do not say; and there is certainly no misstatement or misrepresentation, as I have quoted his own words, which will of course just pass for what they are worth. 3. I have shown the paragraph to several persons, competent to judge, who were all quite as much surprised as myself at the construction you place upon it. But if you desire it, I will add a note in the forthcoming no. of Villiman Jour. like this.

6. The author of the article on the Bot. writings of Raf. in the preceding no. of this journal, being informed by Mr. Nuttall that the paragraph (here cited) is deemed by him to contain a charge of plagiarism against him, would hardly most willingly state, that no such charge was intended,

nor had the writer any idea of making any charge or insinuation whatever, or that the language employed could be taken to convey the idea that Mr. Nuttall's views were derived from Mr. Rafinesque:

If any other form would suit you better, please give it; and in any case write me on the subject by the 15th inst.; if you still wish such a disclaimer to be made.

I have informed Sir Wm Hooker that the Compositae you sent are intended as a present to him.

Remark on the *Euphorbia* - that I proposed him to adopt the name as *his*, and had no expectation that he would publish it as mine. - thank for his kindness: but do not see how that covers the error of which I complained.

You & I differ about *Trichomanes*. You think there are not Gay's *Plumbeae*. I think there are. - Very well. At any rate I have given my own views, which is certainly proper, and have correctly expressed yours.

(I have nothing to do with the matter complained of between Dr. J. & yourself. - But give facts about the *Macranthera* & *Petalanthura*. - that Dr. J. & I said to Pickering, & his reply - *Petalanthura* went to R. Brown in 1832, & returned in 1840. - It - Have not concealed my opinions about it, but should not think of repaying it in kind. - It still remains to be shown how I have injured you, derived from you any ideas without giving due credit, or in any

way lacked in that courtesy, which is due from one author, or man to another. I therefore remain
Yours Respectfully

P.S. By Mrs Lambert's kindness I have a specimen of the plant sold by Fraser as *Anapha mana*, which you shall be welcome to see, when you may better judge whether "my remarks are all wrong from beginning to end".
A.G.